



FRIDAY, SEPTEMBER 12, 1879.

Susemihl & Miller's Grain Door.

Our engraving represents a new form of grain door which has been patented by the gentlemen named above, and has been introduced on the Michigan Central and several other Western railroads. It seems probable that the roads which do a heavy grain traffic will soon require that efficient grain doors shall be attached to the cars furnished for interchange. For this reason, the subject is now attracting more than the usual amount of interest.

The engravings are as follows:

Fig. 1 shows a side view of the door from the inside of the car.

Fig. 2 shows a section through the wall of the car at the rear end of the door.

Fig. 3 shows a plan and section through the segment casting.

Fig. 4 shows the guide-bar (drawn on an enlarged scale) as secured to the floor of the car and the grain door, with hook

tical permanent grain door in use, and is durable, because it is considerably easier to operate and handle it properly than it is to break it.

3d. Ease of operation; raising the door slightly at one end, a comparatively easy operation on account of the long leverage obtained, allows the grain to escape and frees the door of all pressure, when it can be handled with perfect ease. The door does not have to be raised as a whole, while at the same time it bears on the door-posts at both ends, with the full pressure of grain against it, as is the case with most other permanently fastened grain doors. In closing the door there is no danger of breaking it or the pocket, as it moves slowly and is under the perfect control of the operator.

For further information the patentees, Messrs. Susemihl & Miller, may be addressed at the Michigan Central Railroad car shops, Detroit, Mich.

Ballast Unloader.

Last week an opportunity was given to a number of railroad men to see the working of what is called the "American ballast unloader," on the New Jersey Midland Railroad. A construction train is now at work on that line, at Ogdensburg, on which this contrivance is regularly used. It was fully illustrated and described in the *Railroad Gazette* of

The saving due to the use of the "dirt plow," as some one has called it, can easily be estimated if we take into account that the gang of men to unload the material may be entirely dispensed with, the ordinary train-hands being sufficient to unload the train. At the same time the amount of work which a ballast train will do in a given time is very much increased by the saving of time in unloading.

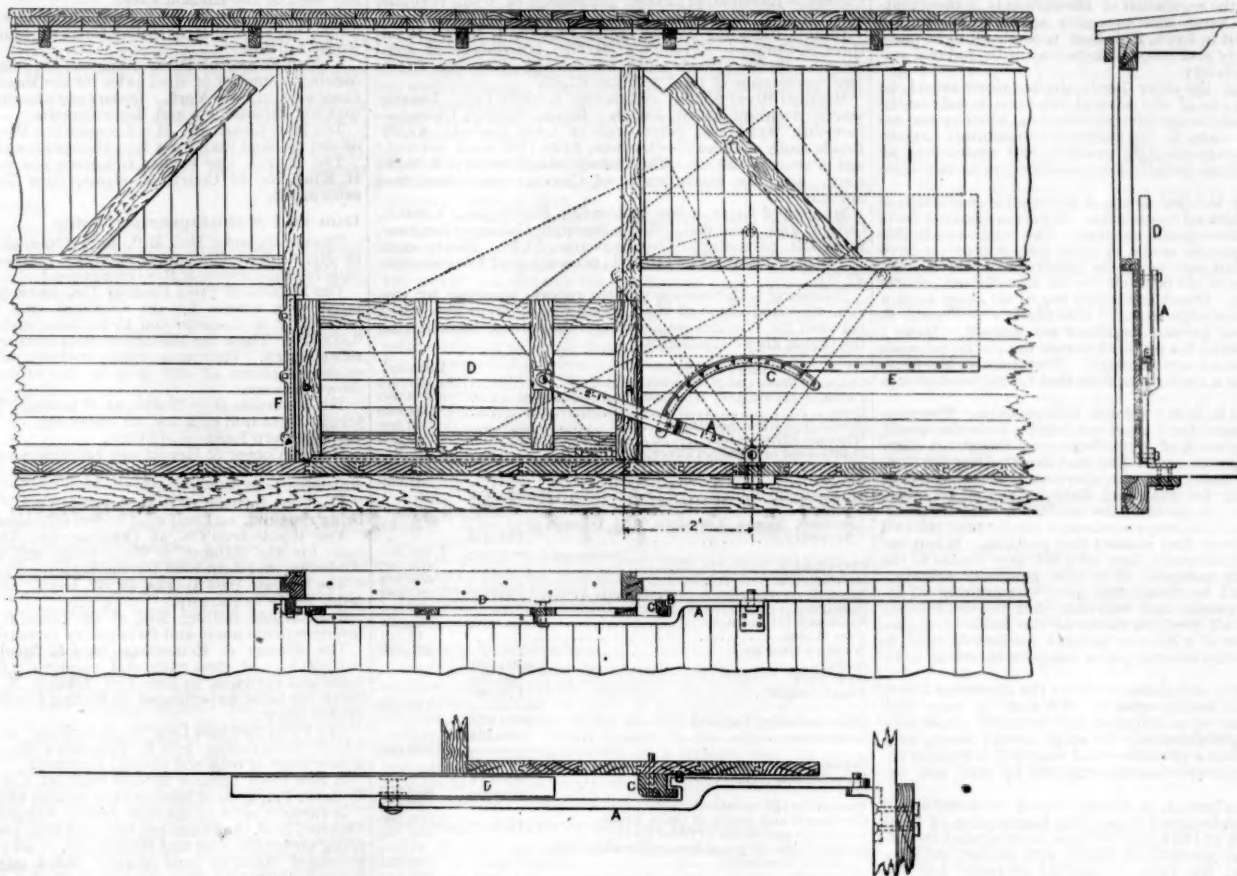
The ballast unloaders are now used on a number of roads, and promise to be an efficient addition to the "plant" of railroads. The American Ballast Unloader Company, of Toledo, Ohio, manufactures the machine and owns the patent.

Robert Toombs on State Railroad Legislation.

Gen. Robert Toombs, of Georgia, who is counted as one of the ablest men of the South, but has sometimes been credited with radical opinions concerning railroad regulation, has addressed the following letter on the subject to the *Atlanta Constitution*:

"I have been requested by a number of members of the general assembly to present my views of railroad policies in writing.

"In my note of yesterday to Hon. A. C. Westbrook I promised to give these views a somewhat fuller expression. It is not to be wondered at that considerable uncertainty and confusion obtain on this subject; indeed, confidence is rather a mark of ignorance than of knowledge, unless this

**SUSEMIHL & MILLER'S GRAIN DOOR.**

B projecting in behind the projecting lip on segment casting, which is shown in section.

The operation of the door is as follows:

The grain door is secured to the car by the guide bar A, which is securely fastened to the floor of the car in the manner shown, the other end of bar being secured to the grain door by a pin in such a manner as to allow the door to turn freely thereon. The guide bar A is provided with a projecting hook B, about midway of its length, which extends behind the projecting lip of the segment casting C, thereby holding the door firmly against the side or wall of the car, but allowing it to move freely side or endwise, in the manner described below.

In raising the door, the rear end is slightly raised with a crow-bar (a suitable casting or pocket being secured in the face of the door for that purpose). This allows the grain pressing against the door to escape immediately, relieving the door of all pressure, when it can easily be pushed over sideways, the rear end being guided and carried by the guide bar A so as to clear the grain remaining around the door-way, until the door clears the door-way or opening, when it will be found to rest in a horizontal position on top of the segment casting C and bottom E, which is secured to the side of the car, above the grain, so as to clear the grain shovel or unloading apparatus.

In closing, the door is pushed endwise off the segment casting until the corner b rests in the groove in the threshold plate, when it is pushed forward, being guided by the groove, until the end of the door enters the pocket F, when the rear end of the door will drop down completely and securely close the opening.

Some of the advantages claimed for this door are:

1st. That it has fewer parts and less complication of levers and bearing parts than any other door claiming to possess the same merits.

2d. That it is cheaper in first cost than any other prac-

May 9, 1879. As those of our readers who were interested in the description will remember, the ballast unloader consists of an iron plow, resembling the snow plows which are fitted to the cow-catchers of locomotives, which is placed on top of a train of platform cars. These are loaded with earth or gravel and the plow is then attached by a rope to the locomotive, the latter being uncoupled from the train, and the plow is then drawn by the locomotive over the tops of the cars, the material with which they are loaded being thus literally plowed or pushed off the cars on each side. Longitudinal timbers are fastened in the middle of the top of the cars, and form a guide which keeps the plow in its place. If it is desired to unload the material all at one place, the plow is fastened by its rope to a cross-tie, and the train is then pulled by the engine out from under the plow.

At Ogdensburg a train of six cars is used in filling up what was formerly trestle work, and in dressing up embankments. The cars are loaded by a steam shovel. At the time the working of the unloader was exhibited, the shovel was at work in a hillside full of loose boulders, some of them three or four feet in diameter. After reaching the place where the earth was to be deposited, the rope was uncoiled and, after it was attached to the plow, the five cars were unloaded in about three minutes. Some delay was occasioned by one of the boulders becoming wedged between two of the cars. The apparatus, too, required some adjustment, as the lower edges of the sheet-iron which forms the mould-boards of the plow were still rough, and scraped hard on the platforms of the car. It was obvious though that a train of half-a-dozen or more cars could be unloaded with it in a very few minutes, thus saving all the time and labor required to shovel the material off the train. It was found that the boulders would be an obstacle which would prevent the working of the apparatus, but with the exception already referred to, they were removed, apparently, with as much ease as loose earth, although, as stated, some of them were three or four feet in diameter.

be the result of long and careful consideration. After having given the subject such consideration on my own part, I distrust my own opinions, and prefer to follow the guidance of experience—not my own views, originating in mere reflection, but those derived from the experience of other countries and states, form the basis of my opinions—the gradual development of some years of thought. There is evidently a general desire on the part of the General Assembly to do right in the premises, to fulfill its constitutional obligations and the public demands without injury to any interest.

"There are three main points:

"1. Action is imperative.

"2. A clear view must be had of the objects to be accomplished.

"3. These objects are best attained by a properly constituted commission, with powers wisely adapted to its ends.

"The first point is a short one. Action is required by the constitution, by the existing state of facts, and by the universal public demand.

"The objects to be accomplished are also sufficiently plain. The object of all laws is the regulation of relations. The railroads have very numerous and important relations:

"1. To the State.

"2. To citizens.

"3. To cities and localities.

"4. To other railroads, viz: To connecting and competing roads.

"5. To express companies, sleeping-car, telegraph and other companies.

"6. The bondholders and other creditors and parties contracting with them.

"All these are external relations. Besides these they have important internal relations:

"7. To stockholders.

"8. To employees managing and operating the roads.

"All these are actual and important relations, and so intricate that to understand them is really a profession. That profession is understood by railroad managers, and the public interests require equal skill and knowledge on the part of those who protect them. The object of legislation is to provide adequately to represent these various interests and relations involving directly \$60,000,000 of capital, and exerting an almost boundless influence, concentrated and controlling, upon all other capital. The degree of concentration is not merely into the hands of stock-

holders but of a much smaller number of managers almost independent, virtually, of the stockholders as of the general public, and capable of putting down one man or community and setting up another, as their judgment or caprice may dictate.

"Consider the importance of having the state itself as an organized community, represented by experts capable of understanding her interests. Under this head take the single subject of taxation. The act of 1874, amended by that of 1876, furnishes an illustration of the inefficiency of ordinary means to deal with this problem. The amount of back taxes unpaid and now due would far more than support a commissioner in perpetuity. There are now pending suits and settlements, the magnitude of which would much surprise those who have not investigated the subject, and the interests of the state in the same matter remain hereafter to be protected.

"The general duty of the state in the protection of citizens, can only be discharged wisely by a knowledge of the condition and operation of the road—not now possessed or attainable. No adequate provision is made for information on this part of the state, as to the violation of charter; as to excessive rates; as to unjust discriminations; as to the extent of exemptions from taxation or other commitments to the railroads by the state; as to embarking in new enterprises by corporations not authorized by law, nor in general for such knowledge of complicated and intricate facts as must form the basis of wise legislation.

"Yet more important are the direct relations of citizens to the railroads. Here, indeed, lies the chief matter to be regulated. Complaints here are universal—not so much of extortion as of unjust discriminations against individual citizens and communities. The complaints are loud and general, and come from all sections of the state. The constitution expressly requires the regulation of the railroads in these matters. To avoid harsh and excessive action, as under the grange movement in Iowa, it is best to settle all these questions in an orderly and dispassionate way with judicial impartiality and sobriety.

"Under each of the other heads similar views might be presented. Any one of the several relations is sufficiently important to deserve careful consideration, whether the relation be to the state, to the citizen or community; to competing roads or connecting, to creditors and contractors, or the interior relations (usually less considered) to stockholders and employees.

"Undoubtedly the best means of the needful regulation is a properly constituted commission. Highly specialized facts and conditions need special agencies. The conditions in this case are so compact as never to have been solved on mere first principles, but only under the guidance of experience. The inadequacies of old methods has led to constant efforts at improvement. Direct legislation has in all cases been a failure. The knowledge required is as really a profession as law or medicine. Let each legislator ask himself, 'Have I sufficiently mastered the problem to risk the public interests on the correctness of my opinion?' Fortunately, however, a man can choose a doctor who feels that he cannot doctor a case.

"A commission is, in my opinion, indispensable. The common-sense argument for it is all-powerful. It is the result of the gradual growth of experience and failure of other means. It has grown up in England like the English Constitution—from many years' experience. That practical people, struggling for truth and light, as exigencies arose, after trying many methods, have settled down with satisfaction upon this. As lawyers consider the old law, the evil and remedy, so have they studied this problem. When one remedy proved inadequate, they adopted new means to the residual evils left uncured. It is now generally acknowledged in England by thoughtful men, representing all interests of state, people and railroads, that the commission as far surpasses all previous means as the hand of a man surpasses the paw of a bear, or perhaps the horse's hoof, in adaptation to all the necessary and complex functions to be discharged.

"The experience of eighteen states of the American Union is confirmatory of British opinion. We may be very sure that these results of enlightened and cautious experience lead us in the right direction. To adopt the old means now were like preferring a primitive road wagon to a finished engine, with all the improvements suggested by trial and experience.

"In my own judgment, as already stated, no better model for legislation can be found than in the English Act of 1873 (in which the Act of 1854 and 1868 are incorporated by reference), under the operation of which, with perfect satisfaction to the public, the value of railroad property has immensely appreciated by a sum more than double the aggregate value of all the property in the state of Georgia. I shall furnish a copy of this Act to the Railroad Committee with modifications to suit our circumstances, as embodying provisions which it is safe to follow. We can safely trust our smaller fortunes on a bottom which has proved capable of bearing such weight.

"The action of the Committee itself will furnish to the next Legislature the needful light for modifications exactly adapted to our circumstances. The following features in the constitution of the commission will command general acquiescence. It should command the confidence of both sides, and all interests. It should, therefore, be unpolitical and unpartisan. Its duties are in some respects analogous to those of a grand jury. As the grand inquest of the state over corporations, it should diligently inquire, and true presentment make, as to the facts of their condition and operation, for the benefit of the state, citizens and stockholders. It requires an expert to understand the facts; an expert to explain them. There should be considerable stability in the commission, dependent simply on good behavior.

"It should not only act as sentinel, but also as arbitrator as between the citizens and railroads, communities and railroads, and between the railroads themselves. It should aid the state in those functions which receive special training in all its departments—executive, legislative and judicial. As an expert, it aids the Attorney-General as to special facts and principles; the Comptroller-General as to matters of taxation, heretofore, too, so intricate that the state has met much harm and loss. It relieves the judiciary department of a class of duties requiring much special knowledge aside from a knowledge of law. To the Legislature it furnishes the basis of intelligent and constant action. Its special functions bear chiefly upon the general public interest. It is an exchange for getting and diffusing the knowledge of laws and facts very important and very inaccessible.

"In one aspect its benefits have been little appreciated. As between the management of the railroad and the stockholders, it is a safeguard in which the stockholding public have an interest not at all inferior to the general public. The management holds the helm quite at arm's length from the shareholders. Nominally dependent, but really independent, it can wreck them or carry them into new ports, defying their opposition. Not more important is a probate judge in the relations between a guardian and an infant than a well constituted commission between the management of a road and its stockholders. These are absolutely at the mercy of the organized powers that be.

"These valuable purposes have been served in the experi-

ence of other states. The commission is a tribunal with specialized functions, requiring special training to meet peculiar exigencies, for which ordinary legislation and judicial decision are as unfit as for the practice of pharmacy or the management of the telephone."

Revenue from New York Shipments.

The following is a statement of the revenue from west-bound shipments over the trunk-lines, to the various Western competing points, and the percentages by different routes west of the trunk lines, as recorded in the office of the Trunk-Line Commissioner and published in a circular issued by him some two months ago. It is for the two years ending with June last:

Chicago, West and Northwest, embracing Chicago, Milwaukee, and Northwest, also that portion of the traffic which passes through Chicago to Iowa, Missouri River points and west, Mississippi River points, Peoria and Illinois, St. Louis, Missouri, Arkansas, Texas, Louisiana and Indian Territory. Division between terminal lines—Revenue, \$4,827,546; Michigan Central, 27.64; Lake Shore, 26.73; Pittsburgh, Fort Wayne & Chicago, 15.22; Pittsburgh, Cincinnati & St. Louis, 0.81; Atlantic & Great Western, 4.88; Baltimore & Ohio, 4.12; Detroit & Milwaukee, 4.08; Flint & Pere Marquette, 0.07; Lake, 16.45.

Iowa, for the two years ended June 30, 1879.—Received by the Chicago roads and roads south of Chicago: Chicago roads—Revenue, \$258,640; percentage of total revenue, 94.91. Roads south of Chicago—Revenue, \$16,982; percentage of total revenue, 5.09.

Peoria, since Oct. 1, 1877.—Roads through Chicago—Revenue, \$2,232; percentage of revenue, 1.95. Roads south of Chicago—Revenue, \$112,084; percentage of total revenue, 98.05.

Illinois, including Peoria, prior to Oct. 1, 1877.—Roads through Chicago—Revenue, \$138,309; percentage of total revenue, 88.98. Roads south of Chicago—Revenue, \$216,490; percentage of total revenue, 61.02.

Missouri River points, embracing Kansas City, Leavenworth, Atchison and St. Joseph.—Roads through Chicago—Revenue, \$144,089; percentage of total revenue, 47.02. Roads south of Chicago—Revenue, \$198,718; total percentage of revenue, 52.98. The Chicago roads ran over 2.02 per cent., and the roads south of Chicago were short that amount.

Mississippi River points, embracing Burlington, Keokuk, Quincy and Hannibal.—Roads through Chicago—Revenue, \$100,359; percentage of total revenue, 52.70. Roads south of Chicago—Revenue, \$110,021; percentage of total revenue, 47.30.

Following is the summary of the report, showing by revenue the distribution of West-bound freight from New York between the Western connections of the trunk lines during the period above mentioned:

Destinations.	Revenue.
Chicago, West and Northwest.....	\$4,827,546
Chicago, Milwaukee, Wisconsin and Northwest.....	3,720,080
Iowa.....	275,622
Mississippi River points.....	210,380
Missouri River points.....	342,878
Points west of Missouri River.....	377,368
Peoria (21 months).....	114,316
Illinois.....	381,969
St. Louis.....	\$1,319,619
Missouri.....	50,830
Arkansas, Texas, Louisiana and Indiana Territory.....	123,904
Cleveland.....	1,494,353
Detroit.....	464,660
Toledo.....	483,811
Michigan.....	287,997
Sandusky (21 months).....	378,580
Port Huron.....	14,651
Western Canada.....	15,191
Buffalo.....	323,598
New York.....	\$395,391
Pennsylvania.....	59,288
Ohio (including Dayton).....	178,088
Columbus.....	\$864,974
Indiana.....	134,124
Indianapolis.....	999,098
Evansville (12 months).....	\$538,069
Cincinnati and south of Ohio River.....	267,277
Louisville and south of Ohio River.....	805,297
South of Ohio River at Evansville and Cairo.....	57,574
Nashville (9 months).....	1,203,289
Pittsburgh.....	608,756
Wheeling.....	11,512
Parkersburg.....	31,955
West Virginia.....	597,042
Total.....	73,519
	16,359
	1,826
	\$13,808,347

RAILROAD LAW

Legal Process against Property in Charge of Carrier.

Recent cases have relaxed the ancient strict rule by which bailees were formerly held estopped to deny the title of their bailor. In some cases the estoppel has been applied to preclude the bailor from showing a title paramount in a third person. It has long been settled in the bailor's favor that he is exonerated by the seizure of the thing upon legal process against the bailor. The main controversy has been whether process against a third person is enough. The question usually arises: between consignor or consignee and carrier, and in the great extension of business by through carriage in different and distant states the question becomes an important one. For instance, a man in a distant state orders goods from New York to be sent C. O. D. On arrival they are attached, in the hands of the carrier, on process against a third person, or perhaps against the buyer. The officer proposes to take them out of the carrier's hands. The carrier has every reason to believe that they still belong to the consignor, but here is the officer and the legal process. If he gives them up, is he liable to the consignor unless he can show that they did not belong to the consignor, but were lawfully taken on process against another? If he resists, is he liable to the prosecuting creditor unless he can prove the consignor's title? Is he bound to defend as a stakeholder?

The courts of this state (New York) some years since established the rule that if he voluntarily surrenders the goods he takes the peril of justifying by proving a paramount title; but, on the other hand, if they are taken from him without his assent, the process under which they are taken protects him if he immediately notifies the consignor.

This rule is to be taken with the qualifications that he be guilty of no connivance, and that the process be valid legal process from a court having jurisdiction.

The Supreme Court of the United States have recently carried the protection of the carrier somewhat further. The Circuit Court in this district held that the rule that a carrier cannot dispute the title of the shipper of goods is subject to two exceptions, viz.: 1. Where the true owner has compelled a delivery to himself by judicial proceedings; 2. Where the shipper has obtained possession of the goods by fraud or felony, and they have been delivered by the carrier

to the true owner. The carrier may always defend himself by proving the actual delivery of the goods to the true owner, although without judicial compulsion. He may dispute the shipper's title if he has actually delivered the goods to the true owner, but cannot while retaining possession of them.

The Supreme Court held that the carrier sufficiently accounts for the thing bailed when he shows actual delivery on the demand of the true owner, who had a right to the immediate possession paramount to that of the bailor. Legal proceedings or proof of fraud are not necessary.—*New York Register*.

THE SCRAP HEAP.

Railroad Equipment Notes.

The Rhode Island Locomotive Works, at Providence, are building three engines for the Southeastern Railway, of Canada, besides other work.

The Ramapo Wheel & Foundry Co., at Ramapo, N. Y., has its shops full of work with many orders ahead. Besides work for home roads, orders are on hand for 750 pairs of wheels and axles for foreign countries.

The Atlantic & Gulf shops, in Savannah, Ga., lately turned out two new postal cars to run between Savannah and Jacksonville, Fla. They are handsomely finished and very strongly built.

The Harlan & Hollingsworth Co., at Wilmington, Del., have taken a contract to build an iron steamboat 300 ft. long and 40 ft. beam to run on the Hudson River for the Albany Day Line. The engines, two in number, with cylinders 78 in. diameter and 12 ft. stroke, will be built by Fletcher, Harrison & Co., of New York. They will be horizontal engines, instead of the walking-beam pattern generally used on the Hudson River.

The Wason Car & Manufacturing Co., at Chattanooga, Tenn., has several large orders for cars, and is running its works full time.

Vulcan Forge, of Park, Long & Co., at Pittsburgh, is making a number of steel axles for the Manhattan Elevated Company, in New York. Orders are also on hand for forgings for Philadelphia and Boston parties.

The Manchester (N. H.) Locomotive Works have more orders on hand than for a long time past, and are very busy.

The Detroit Car Spring Company has appointed Mr. A. H. King, No. 46 Courtland street, New York, its Eastern sales agent.

Iron and Manufacturing Notes.

The old Superior Rail Mill, at Pittsburgh, now operated by Mr. Andrew Klonan, is making 6,000 tons of light steel rails for the Denver & Rio Grande road.

The Pittsburgh Steel Casting Co. have just made three large spur wheels for the Cambria Iron Company, each wheel 7 ft. in diameter and 15 in. face, and weighing over 6,000 lbs. These are the largest steel castings ever made in this country. They were made entirely of crucible steel, without a pound of cast iron in the mixture.—*American Manufacturer*.

The Riverside Iron Works, at Wheeling, W. Va., are to furnish light iron rails for an extension of the Bellaire & Southwestern Railroad, in Ohio.

Messrs. Cooper & Hewitt are preparing to start up their large blast furnace at Ringwood, Passaic County, N. J., which has been idle for several years.

The blast furnace at Wrightsville, York County, Pa., is being repaired, and will soon be put into blast.

The Roane Iron Co., at Chattanooga, Tenn., is making rails for the Atlanta & West Point and the Western, of Alabama, and light rails for the Texas & St. Louis road.

The Vulcan Iron Works, at St. Louis, are being put in order ready to start up.

The Laclede Rolling Mill, at St. Louis, is to have many improvements made and its capacity increased one-third.

The Albany & Rensselaer Iron & Steel Co. is turning out 250 tons of steel rails, and employs 2,600 men at its mills and furnaces in Troy and Albany, N. Y. Some difficulty has been experienced in finding a sufficient supply of skilled labor.

The Potts Brothers Iron Co. is building an addition 40 by 140 ft. to its rolling mill in Pottstown, Pa. It will contain a new train of rolls and several furnaces.

A new blast furnace is to be built at Cornwall, Lebanon County, Pa., ground having been broken already.

A furnace built by the New Jersey Spiegel & Iron Co., at Chester, N. J., has been run for some time past on gray iron, using anthracite coal and Hedges ore, of 42 per cent. It has averaged about 26 tons of good iron a day, which is considered an extraordinary production for a furnace of its size, 10½ ft. bosh and 32 ft. high.

All the rolling mills in the Mahoning and Shenango valleys are now at work except the rail mill at Wheatland, Pa., the mill of Reis, Brown & Berger, at New Castle, Pa., and the Ridgway mill, at Youngstown, Ohio.

The Pittsburgh Forge Co. has taken W. J. Hammond's lease of the Aikanna Rolling Mill, near Steubenville, O., and will run it on muck bar.

The rolling mill at Hollidaysburg, Pa., which has been idle for several years, is being repaired and will soon be started up. Some of the puddling furnaces are already in operation.

Welsh & Barnum will start up the Spuyten Duyvil Rolling Mill in New York about Sept. 15 on a contract for 10,000 tons of iron rails. The price is said to be \$46 per ton, delivered in Kansas City.

Bridge Notes.

We last week copied from a local paper a statement that the Keystone Bridge Co., of Pittsburgh, had taken contracts for highway bridges over Bald Eagle Creek at Tyrone, Pa., and Blair Creek, at Duncansville. We are now informed that the statement is incorrect; that the Keystone Bridge Co. did not receive the contracts, as it did not put in any bid for the work.

The Massillon Bridge Co. has completed a new brick shop at Massillon, O., and has a number of orders on hand.

The Union Foundry and Machine Co., at Catsaqua, Pa., has received a contract for 180,000 cast-iron washers for a bridge company in New York.

The Highway Commissioners of the town of Schaghticoke, Rensselaer County, N. Y., will receive, at Hart's Falls, N. Y., until Sept. 15, bids for the masonry and superstructure of an iron highway bridge over the Hoosic River, to have two spans of 111 ft. each, two of 81 ft. each and one of 31 ft.; about 415 ft. in all.

The contract for the new highway bridge over the Hudson River, between Cohoes and Lansingburg, N. Y., has been awarded to the Leighton Bridge & Iron Works, of Rochester, N. Y., for \$35,000.

Prices of Rails.

Steel rails are unchanged. A considerable business is reported for 1880 delivery at about an average of \$50 per ton at mill. It is reported that an order for 15,000 tons has been placed with an English firm, prices not known, but said to be slightly below American quotations, delivered in New York.

Iron rails are still in active demand and are quoted at \$41 per ton at mill for 56 lbs. and over, and \$42 for light sections. Foreign are quoted at \$42 per ton at tide-water.

Old iron rails are still higher. Philadelphia quotations are \$28.75 to \$27 per ton; Pittsburgh as high as \$29. Some large foreign lots are reported on the way. Old steel rails, no quotations.

Railroad spikes are increasing in price, with a very active demand. Pittsburgh quotations are \$2.85 to \$3 per 100 lbs. at mill.

Blind Sidings.

It is worth a trip to Holyoke any day to hear a brakeman on one of the moving trains call out: "Willimansett," and hear the strangers guess at what he says.—*Springfield Republican*.

The Intercolonial railway can beat any line on this continent for jaw-breakers. Up there the brakemen have to wrestle with Miramichi, Ristigouche, Metapedia, Apohaqui, Plumweseep, Assametsquahan and the like.

Report says most of the conductors on the Shore Line road were formerly theological students, and one of them is a lay preacher now, and able to preach a good sermon.—*Bridgeport (Conn.) Standard*.

The excursion manager who announced that the party would have "three full days in Chicago," no doubt bided his advertisement better than he knew.—*Keokuk (Ia.) Gate City*.

British Rail Exports.

Exports of steel and iron rails for the seven months ending with July are reported as follows by the British Board of Trade:

	1879.	1878.	Inc. or Dec.	P. c.
Iron.....	23,223	86,761	D. 63,538	73.3
Steel.....	184,623	147,750	I. 36,873	25.0
Total.....	207,846	234,511	D. 26,665	11.4

In "railroad iron of all sorts," the exports were 251,374 tons this year and 283,374 last year, from which it appears that 43,428 tons of the exports this year and 48,868 last were not rails.

Of this "railroad iron of all sorts" the exports to the United States were 8,957 tons this year against 568 tons last year. The average value of the iron rails exported this year is given as \$28.25; that of the steel rails, at \$29.50, both of which are much above what the current market prices in England have been.

Railroad Wrecks.

The Boston Advertiser of Aug. 27 says:

"The following synopsis, compiled from *Poor's Manual*, may be interesting to those who are looking out for good investment in wrecked railroads. To make it complete, some of the other states ought to be included:

States.	Miles of R. R. in default of interest in each state.	Stock and debt of R. R. in default.	Net earnings of R. R. in default.
Ohio.....	1,909.96	\$180,454,511	\$1,683,586
Michigan.....	2,434.57	91,946,943	1,896,588
Indiana.....	2,341.46	107,563,386	1,896,257
Illinois.....	3,885.05	168,491,082	3,911,806
Wisconsin.....	1,242.00	55,718,684	888,657
Kentucky.....	572.95	23,718,684	313,234
Missouri.....	1,490.92	94,702,106	2,091,738
Minnesota.....	1,844.00	105,508,700	1,204,211
Nebraska.....	442.08	7,831,103	153,368
Iowa.....	1,286.00	50,432,856	1,124,289
Kansas.....	1,579.77	83,495,412	1,572,013
Totals.....	19,088.76	\$960,803,470	\$16,555,837

"Net earnings upon capital invested, 1.7 per cent.

"The above table only includes railroads in default in the payment of interest. If to the above were added the share capital on which no dividends are paid, the amount of unproductive capital would be very largely increased—say \$1,200,000,000."

She Was Ready to Swear.

The Union Pacific authorities have been exercised over a fraud attempted upon them by a San Francisco lady, the daughter of a wealthy diamond broker. She presented for passage at Ogden a return Yo Semite Sunday-school excursion ticket, which she had purchased in San Francisco from some person who had taken advantage of the low excursion rates to make a cheap trip to Frisco. The conductor had the lady write her name on a slip, and upon comparison with that on the ticket discovered the fraud, and, taking up the same, made the lady pay fare to Omaha, at the same time notifying the general passenger and ticket office of his action. Upon her arrival in Omaha, Sunday, the lady insisted that she was not attempting fraud, but said the discrepancy of signature was accounted for in the fact that she had signed her name in both instances under unusual circumstances, one being made by holding the ticket to the car window, and the other on the cars when in motion. She said she had no acquaintances on the train except a gentleman she met on the way from San Francisco to Oakland. He said he had been introduced to her by the name on the ticket. The Pullman car conductor, however, asserted that she had not gone west with him, he having had the excursion in charge on the western trip. She continued her assertions, and being well dressed, handsome, and apparently truthful, she was told if she would make affidavit that the ticket was properly hers her money would be refunded. This she acceded to immediately, and offered to be sworn on the spot, but as no magistrate was at hand the affidavit was not made, and the money not refunded. It now transpires that the lady who used the ticket on the overland journey is in San Francisco, and that the fair one in question was a deceitful little liar, who hoped by falsehood, or even perjury, to cheat the railroad out of a few dollars.—*Omaha Republican*, Aug. 28.

A Train Dispatcher's Yarn.

"It was quite exciting," said another railroad man. "I know of an accident that was far more exciting, however, and it happened on the Marietta & Cincinnati Railroad not many years ago. It came near costing a number of lives."

"What was that?" was the general inquiry; and then with one accord the circle closed up around the man who apparently had a "yarn to spin."

"It happened east of Chillicothe. You all know Bill Gallagher, passenger conductor on the M. & C.? Yes, well, that fellow has been in more accidents and shows fewer scratches than any man I ever saw. At the time I speak of he was conductor of a freight train on the M. & C. He had a lively train one night, and the operator had orders to instruct Gallagher to side-track it at the next station east of Chillicothe. The operator made a mistake, however, and the order Bill received sent him on a station further. The brass-pounder soon found out that he had made a grave blunder, and one which might cost many lives. Upon making the discovery, he became almost insane from fright, and by his remarkable actions attracted the attention of every person near, among others Charlie Howard, the train dispatcher. He raved like a crazy man, and no one could get anything out of him, except that he was the cause of some terrible calamity about to happen on the road. Charlie Howard watched and listened to the man attentively for some minutes, and from his knowledge of the trains and running time, he guessed at the true state of affairs. The next station was called, and the startling information learned that the freight train had passed there. The west-bound passenger train was also

found to be on time, and a terrible collision on the road seemed at the time inevitable.

"Charlie Howard proved the right man in the right place that time. An engine was hastily brought out and pressed into use. A red-hot fire was soon causing the steam to angrily hiss from the valves. The throttle was pulled open and the engine sped away like a frightened race-horse. Never was such time made on the rail before. The engine was urged on at a frightful rate of speed, in the seemingly vain hope of overhauling Bill Gallagher's freight train. At last the object being chased could be seen a long ways ahead, and the steam whistle was called into use. Gallagher saw the engine bearing down upon him and heard the whistling, which he failed to understand. In some way he became impressed with the idea that another freight train was behind and rapidly approaching him. Relying on the telegraphic orders he had received, and desiring to keep away from the supposed train behind him, he hurried his own train ahead. Thus it happened that a very ill-timed match commenced and promised to frustrate the plans of Charlie Howard. Gallagher's train was being pushed to its utmost speed, and the time consumed in shortening the distance between it and Howard's engine seemed painfully long to the pursuing parties. Steadily but surely, however, Gallagher was overhauled, but it was not until the signal engine touched the rear end of the freight train that the signal 'down brakes' was understood. The train soon came to a stop, the situation was hurriedly explained, a signal was thrown out, and in a few minutes Bill Gallagher's freight was backing up with all the power that two engines could supply. Scarcely had the train commenced to back when the shrill whistle of the passenger train coming west was heard. In a few seconds the cars could be seen sweeping around the curve beyond, at a speed of 25 miles an hour. The signal thrown out stopped the train, and thus a terrible disaster was prevented. Charlie Howard got the freight train back to the side-track and the passenger train passed on with its human freight, all unconscious of the great danger a cool head and prompt action had averted. I have no doubt many men on the road are familiar with the story."—*Cincinnati Times*.

The Advance in the Price of Steel Rails.

The Bulletin of the American Iron and Steel Association says in its issue of Sept. 3:

"The increase in the price of Bessemer steel rails to \$50, we have the very best reasons for knowing, is not due to the action of the mills at all, but to the course pursued by the railroads. Last year the mills were anxious to fill orders at \$40 to \$42, but through the timidity of some railroads and the disposition of others to crowd prices down to a still lower point orders were not abundant and the mills were only partially employed. Early this year, however, some of the railroads being in better financial condition, and others having discovered that prices could go no lower, orders were freely given out until the mills soon had more work on hand than they could promptly dispose of. Then commenced a scramble among the railroads for favors; they all wanted rails at the earliest possible time. But few of them could wait, or were willing to wait, and those which could not or would not at once began to compete with one another for early deliveries. They advanced prices and excited the market. They are still engaged in fighting out their rivalry on this line, and will probably take all summer to finish the contest. Here is the true explanation of the high prices for steel rails.

"It is proper to add, however, that the large majority of the orders which the mills are now filling are at prices much below the present market quotations. Contrary to the general opinion, we do not think that prices can go any higher than they now are."

Painting Locomotives.

Until further orders, all Chicago, Burlington & Quincy engines, both freight and passenger, are to be painted a uniform black, without the relief of a single stripe or a shadow of gold. The interior of the cab will be green, the lettering yellow, as also the 18-inch figures on the sides and rear of tank—but everything else will be a sombre hue. In carrying out this order, we understand, a saving of about \$30 will be saved upon every engine painted—something over \$2,000 annually.—*Aurora (Ill.) Beacon*.

Breakage of Rails on British Railroads.

The Engineer gives the following summary of the failure of rails in Great Britain.

"Of the 490 rails which were found fractured in the permanent way of the British railways in 1878, 377 were double-headed, 77 were single-headed, 15 were of the Vignoles section, 18 were bridge rails, and the form of the remaining three was not stated; 283 were made of iron and 206 of steel, and, in one case, the material was not stated. Of the double-headed rails 214 had been turned."

This evidence would be conclusive against the form of double-headed rails, and the practice of turning them, if they were not very much more numerous in England than single-headed rails.

Safety Car Steps.

The Delaware & Hudson Canal Company is trying on the cars of one of its railroad lines an improvement designed to prevent accidents in getting on and off cars. It consists of movable steps attached to the platforms, which are let down when the train stops and furnish the usual convenience for getting off the car. When the train starts they are raised and, being held in place by catches, form a gate or fence making it difficult for anyone to jump off the car.

The Samson Rail Joint.

In January, 1878, Messrs. Sellers, Fowler & Co., of Chicago, completed their first works built especially for the manufacture of their rail-joint known as the "Samson" splice-bar. During the first year (1878) they sold to a few of the leading Western roads only about 100,000 splices, but in the first eight months of 1879 they have taken orders for over 1,000,000 of these bars, 800,000 of which they have already delivered. They claim that fully 75 per cent. of the new track laid in the West this year has the Samson joint, and several prominent roads are using it to replace old-style rail-joints in their main tracks. The works were started without a single customer, and in less than two years are running to their utmost capacity, with orders for over 100,000 a month from more than 40 roads.

Among the roads which have adopted the Samson joint exclusively or in part are the Lake Shore & Michigan Southern; Cleveland, Columbus, Cincinnati & Indianapolis; Cincinnati, Hamilton & Dayton; Michigan Central; Chicago, Burlington & Quincy; Chicago, Rock Island & Pacific; Chicago & Northwestern; Atchison, Topeka & Santa Fe; Hannibal & St. Joseph; Union Pacific; Northern Pacific; Toledo, Peoria & Warsaw, and many others.

Canal vs. Railroad in China.

The Chinese Government having set itself against railroad building in its domain, attention has been turned toward the subject of canal transportation. This latter means of communication has the sanction in the Flowery Kingdom which comes from great antiquity. The railroad was invented by the foreign devils, and was decidedly an innova-

tion, a fact which accounted for the willingness of the authorities to buy up and destroy the short line which was built between Shanghai and Woosung. But to canal construction no such objection can be raised, for the Grand Canal, which connects the Peiho with the Yang-tse, has been in existence for a number of centuries. This great and useful public work has, however, been neglected. In many parts the water is so shallow that in making a voyage through it it is no uncommon thing for a large boat to have smaller boats in tow, in which a portion of the cargo can be placed when it becomes necessary to cross one of these impediments. An English engineer, Mr. Morrison, has recently made a survey of the Grand Canal, and his opinions as to its improvement are embodied in a report made to some of the Chinese officers. He points out that China proper possesses unrivaled facilities for inland navigation, and that its great artificial route could be kept in good order for an exceedingly moderate expense, when the length and importance of the canal are considered. The trouble in the past has been in the total absence of scientific knowledge, and thus, when a season of light rains occurred, the canal became unnavigable. He points out that by a little dredging and by the application of scientific principles nothing but ice in winter would interfere with the passage of large boats from one year's end to the other. The suggestions are no doubt important, but in carrying them out it is exceedingly likely that the mistake will be made of intrusting the duty of planning and carrying out the improvements to Chinese officers, who will follow the methods of their forefathers rather than the advice of a foreign engineer.—*New York Times*.

A Modest Conductor.

A few nights ago Conductor Verrill, of the Virginia & Truckee express train, was going through his car when he noticed a lady asleep in her seat. Her head was resting on the window-sill and her feet extended to the aisle. Her dress was so badly disarranged that her ankle and a goodly portion of an exquisitely-fashioned calf were plainly visible, and a number of men a few seats further down were contemplating the scene with evident satisfaction. Mr. Verrill, who always keeps things pretty straight on his train, noticed this, and tapping the woman on the shoulder awoke her.

"Madam, excuse me for disturbing you, but your dress is so disarranged that your ankle is exposed."

"Oh, that makes no difference, sir," replied the lady, smiling sweetly, "it's nothing, but cork."

Verrill was in the baggage car in less than four seconds, wiping the perspiration from his brow.—*Virginia (Nev.) Chronicle*.

Sixty Miles an Hour.

Quite a controversy has been carried on by correspondents through the columns of the New York Sun as to whether locomotives can and do attain a speed of a mile a minute. An apparently competent witness appears in the person of Mr. E. S. Ellis, a responsible citizen of Trenton, N. J. He recently rode to New York on one of the fast trains of the Pennsylvania Railroad, having with him a stop-watch marking seconds, such as is used for timing horses. With this he found that at one part of the road the train made five miles in 4 minutes 55½ seconds, or at the rate of 60.97 miles an hour, while in another place it covered the track between two mile-posts in 50 seconds, making the mile at the rate of 72 miles an hour, if the mile-posts are a mile apart.

A Railroad Question.

Just as the House adjourned yesterday, the clerk read the following resolution by Mr. Paine, of Chatham. It was unanimously adopted and enthusiastically applauded:

"Resolved, That this railroad question stamps this House a little the worse. The more members think about and talk over it, the more we can't tell. As near as we now remember, we are of the opinion that we don't know. Much has been, and much more may be, said, and neither prove correct. Upon the whole, we are inclined to think that we should, or that we should not, just as every member thinks least or otherwise. Some think through freights are through freights, and some think local freights are local freights; and the object of this resolution is that each may think himself right in this matter just as he pleases."—*Atlanta (Ga.) Constitution*, Sept. 4.

The Iron Business in the Lehigh Valley.

The following is an extract from a letter handed us by a friend; it is from a large iron concern in the Lehigh Valley in answer to an application from an old customer for a bid on some work:

"At present and for the next month or two we are and will be so busy on work for the neighboring furnace companies who are rushing every stick into blast, that we are unable to bid on any work such as you so kindly offer us. This valley is all excitement, surpassing even the busy times of 1872. Bars which we sold at 1.9 in May we are now getting 2.3 for, 8.96 advance."

The Missouri River Bridge at Plattsmouth, Neb.

The contracts for this bridge, the foundations of which have been in progress for some time, have just been let. It will connect the Burlington & Missouri River Railroad in Nebraska, with the Burlington & Quincy Railroad in Iowa. It will consist of two 400-ft. spans of through bridge, three spans of 200 ft. each, 120 ft. of iron viaduct at the west end, and 1,440 ft. at the east end, besides 2,000 ft. of temporary wooden trestle. The two long spans will be made of steel, with the exception of the intermediate posts, the floor-system and the lateral struts, which will be made of iron. The steel will be made by Messrs. Hussey, Howe & Co., by the Hay process. The eye-bars to be rolled by the Klonan machine.

Two of the foundations have been put down by the pneumatic process, one foundation in the west side is in rock, and two are on sheet piling.

The Chief Engineer is Mr. Geo. S. Morison, of New York, but during the construction of the work, he will reside at Plattsmouth.

A Long Way after a Small Rebate.

Application for a rebate of freight charges are of course daily received at the Central Vermont head-quarters, but one came in the other day which is probably unparalleled in the history of that or any other railroad. Some time since a freight consignment was shipped via that road to Yokohama, Japan. On its arrival there the consignee discovered an overcharge of seven cents, and the other day an application was received at the office here for the return of that vast sum. The document has been some six months in transit, and bore the signature of forty-six railroad and other officials, attesting the enormous overcharge mentioned.—*St. Albans (Vt.) Messenger*, Sept. 5.

Fast Time.

Dave King, engineer of Pittsburgh engine 161, immortalized himself yesterday by making the run from Chicago to Fort Wayne, a distance of 148 miles, in two hours and 50 minutes, which, exclusive of stops, would average a running time of 60 miles an hour. This is the fastest time ever made between Fort Wayne and Chicago. He drew two cars, carrying some Eastern railroad moguls.—*Fl. Wayne (Ind.) Sentinel*, Sept. 6.



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EDITORIAL ANNOUNCEMENTS.

Addresses.—Business letters should be addressed and drafts made payable to THE RAILROAD GAZETTE. Communications for the attention of the Editors should be addressed EDITOR RAILROAD GAZETTE.

Advertisements.—We wish it distinctly understood that we will entertain no proposition to publish anything in this journal for pay, EXCEPT IN THE ADVERTISING COLUMNS. We give in our editorial columns OUR OWN opinions, and those only, and in our news columns present only such matter as we consider interesting and important to our readers. Those who wish to recommend their inventions, machinery, supplies, financial schemes, etc., to our readers can do so fully in our advertising columns, but it is useless to ask us to recommend them editorially, either for money or in consideration of advertising patronage.

Contributions.—Subscribers and others will materially assist us in making our news accurate and complete if they will send us early information of events which take place under their observation, such as changes in railroad officers, organizations and changes of companies, the letting, progress and completion of contracts for new works or important improvements of old ones, experiments in the construction of roads and machinery and in their management, particulars as to the business of railroads, and suggestions as to its improvement. Discussions of subjects pertaining to ALL DEPARTMENTS of railroad business by men practically acquainted with them are especially desired. Officers will oblige us by forwarding early copies of notices of meetings, elections, appointments, and especially annual reports, some notice of all of which will be published.

THE LAW OF THE DEPOT.

The station-master's duty is coming to be regarded as more and more important. A great deal depends on the careful and thorough supervision of all matters connected with the management of a depot. The courts will cast the company in damages whenever a passenger complains of an injury sustained through defective condition or careless regulation of matters at a station; provided, of course, the passenger was not himself careless. And that is a matter which agents of the company cannot reckon upon. The station-master, starter and gateman, even workmen employed about a station, have need to take very great care that everything is kept in safe condition and all duties are promptly and skillfully performed. It is not enough to take ordinary care, such as is expected in other kinds of business. Very high care, extreme care, is due in the performance of all duties involving the safety of passengers. Some judges have said that the management must take the highest possible care; but this is rather strong language. Yet, as railroading is somewhat dangerous business, especially to inexperienced, infirm or ignorant passengers, a care is required proportioned to the complexity of the service and the hazard.

And this doctrine applies even to persons coming to the station to take the cars, and before they have bought their tickets. If the company assumes to run an omnibus to bring passengers to its trains, and places it under the general charge of the station-master, he might let the company in for a lawsuit, by neglecting proper supervision, if a traveler was hurt in consequence, while on the way to the station. So, if a person is injured when entering the depot to buy tickets, through the bad condition of things there, it is no answer to his lawsuit to say that he had not yet paid his fare. If he were coming to pay it, that is enough.

Whoever is in charge of keeping the grounds around the station, and the approaches to it, in order, must see that they are kept in safe condition. There was a flag-station on the Chicago, Rock Island & Pacific road where trains often stopped to take on corn. In hand-

ling it, some was often spilled on the ground, and the spot became a favorite loafing place for the stray cows of the vicinity, who would come to lick up the loose kernels. Once or twice a cow loitering upon the track for this purpose was run over, and at length a train which ran over one was wrecked and a passenger was injured. The court said that the company was liable. The management ought to have had the loose corn swept up, or else to have had the cows driven away.

The companies have the legal right to appoint a particular gate or door for passengers to enter by, and forbid their coming in by the gates set apart for employes; also to forbid their going into the trains without showing tickets, and to forbid men traveling alone from taking seats in the ladies' car. These rules must be enforced by a gateman standing at the door, and he must keep at his post and attend to his duty. It will not answer for him to leave the door unguarded, and, after a passenger has passed in, drag him back. This, at least, was decided in a New York city court. The story of the case was that a traveler for the Harlem Railroad, having a commutation ticket, and therefore not needing to visit the ticket office, assumed to go into the train at a gateway on Forty-second street, which stood open and was handier for him than to go through the passengers' waiting-room, but was for the employes only. Nothing but a placard opposed his entrance, and he had fairly reached the steps of the car when the watchman collared him and pulled him back. He produced his ticket, but this was not deemed satisfactory. He was ejected with some violence and made to go around and enter through the passenger-room. He recovered \$200 damages. The court said that a company may prevent, by force, travelers from entering by a gateway that is forbidden to them, but that a passenger who has entered without opposition cannot be turned out because he entered through the wrong door.

Platforms and stairways about a railroad station have often given rise to lawsuits, where the station-master has allowed them to get out of repair or into bad condition and a traveler has been hurt in consequence. While Johnson was President, he made a trip over the Pennsylvania road, and wherever the train stopped at way stations, the people gathered to look at him and get a speech. At Johnstown the station platform broke down under the weight of the unusual crowd. One of the persons who was hurt sued the company, and proved that the platform was old and the timbers rotten. But the Court inquired whether he had come to the station to take the train, and he said, No; he was only there to see the President. The Court said if that were the case, he had no ground to sue, for the company was not bound to keep a strong platform for a crowd of sight-seers. But they said that if any passenger were injured by the defect, or even any person who had come to meet a passenger or to see one off, he could have recovered damages. A station-master on the New Jersey Railroad allowed a hole in the floor of his station to go unmended, until one day a lady passenger, on alighting from the cars, caught her foot in it, and fell and was badly hurt. At Wells River depot there was a flight of steps to the platform. The depot-master did not keep the stairway lighted properly at night, and a lady passenger who had come to take a night train, in groping about in the dark to find her way, fell down the steps and hurt her hip so as to become a cripple for life. The Court said, in both these cases, that the companies must pay. At one of the stations of the New York Elevated road the people in charge allowed the steps and platforms to get icy, from rain and snow falling and freezing; and a passenger slipped, fell and was permanently hurt, so badly that the jury gave him \$9,000 damages. The judges said that this was right. The agents of railroad companies must take more than mere ordinary care in keeping their floors and platforms in a safe condition for passengers; they are bound to use "all such reasonable precautions against injury as human sagacity and foresight can suggest." They are bound to be on the alert during cold weather to see whether there is ice on the platform, and to remove it or make it safe by sanding it or putting ashes upon it, or in some other manner. And so in a variety of other instances, the companies have had to pay heavy damages to passengers, because the platforms were neglected.

Attention is due to the condition of the waiting-rooms, and to the behavior of persons who congregate in them. Passengers have a right to expect that pains will be taken to protect them from violence of fellow-passengers. Noisy, turbulent, drunken and quarrelsome persons have no legal right to remain in and about the station, and if a station-master has reason to anticipate disorderly conduct he should interfere to repress it. And he may, no doubt, order such a per-

son to leave, and, if he refuses, may have him put out, always taking care that he is not hurt, and that no unreasonable or unnecessary force is used. In Iowa, a woman was badly hurt in getting upon the cars, or trying to, and a suit was brought. The company said she was to blame, for she was trying to get aboard the train before it was ready; if she had waited till the proper time she would have had no difficulty. She and her husband then testified that the depot-master had allowed people to smoke in the passenger-room until the air was so offensive and unwholesome that it actually made her sick, and this was the reason she had tried to get into the car so early; moreover, there was no notice but that the train was ready; she supposed it was. The Court said she was right. If the company's agents would not keep the passengers' room in decent condition, they must expect passengers to be in haste to enter the cars.

These are not nearly all the cases which might be mentioned in which neglect of duty by those in charge of a depot may expose the company to heavy damages. But they are enough to explain and illustrate the rule of the courts; which is, that extreme care must be taken, by all these employes, in respect to everything which involves the safety of passengers.

Atlantic Grain Receipts.

For the eight months ending with August, receipts of grain of all kinds at the seven Atlantic ports, have been as follows, for the past four years, in bushels:

	1879.	1878.	1877.	1876.
New York.....	76,222,297	73,533,640	35,038,292	42,938,374
Boston.....	13,454,061	12,590,954	7,974,213	8,192,893
Portland.....	1,032,879	1,500,754	760,443	1,738,442
Montreal.....	7,518,110	7,081,718	5,318,977	8,183,963
Philadelphia.....	32,202,800	25,446,810	11,745,870	21,495,000
Baltimore.....	37,023,730	26,380,900	18,522,784	18,655,024
New Orleans.....	8,130,812	8,334,792	5,212,931	4,334,490

Total.....175,593,689 155,449,598 84,578,390 106,528,189

The increases thus in the aggregate receipts, and in the number of bushels received at each principal exporting market since each of the three previous years has been:

	1876.	1877.	1878.	In 1879 more than in—
Aggregate.....	69,065,500	91,015,290	20,144,121	
At New York.....	33,383,923	41,184,005	2,688,657	
" Boston.....	5,261,168	5,479,848	863,107	
" Philadelphia.....	10,707,800	20,457,130	6,755,990	
" Baltimore.....	17,368,706	18,500,946	10,662,830	

New York has made much larger gains than Philadelphia and Baltimore taken together, and as much as Boston. Philadelphia and Baltimore taken together, when this year's receipts are compared with those of 1876 or 1877, but not nearly so much as either Philadelphia or Baltimore when compared with 1878. But the fluctuations in the relative rank of the different cities will be seen better by the following table:

The percentage of the total received at each port, for the eight months in each year, is shown below:

	1879.	1878.	1877.	1876.
New York.....	43.4	47.3	41.4	40.3
Boston.....	7.7	8.1	9.4	7.7
Portland.....	0.6	0.9	0.9	1.6
Montreal.....	4.3	4.9	6.3	7.7
Philadelphia.....	18.3	16.4	13.9	20.2
Baltimore.....	21.1	17.0	21.9	18.5
New Orleans.....	4.6	5.4	6.2	4.0
Total.....	100.0	100.0	100.0	100.0

Comparing the percentages of New York with those of Philadelphia and Baltimore taken together, we have:

	1879.	1878.	1877.	1876.
New York.....	43.4	47.3	41.4	40.3
Philadelphia and Baltimore.....	39.4	33.4	35.8	38.7
The three cities.....	82.8	80.7	77.2	79.0

Comparing the receipts of New York and Boston taken together with those of Philadelphia and Baltimore taken together, we have:

	1879.	1878.	1877.	1876.
New York and Boston.....	51.1	55.4	50.8	48.0
Philadelphia and Baltimore.....	39.4	33.4	35.8	38.7
The four cities.....	90.5	88.8	86.6	86.7

Though New York's percentage is materially smaller than last year, we see that is greater than in either of the two previous years. Philadelphia had a larger percentage in 1876, and Baltimore a larger one in 1877 than in this year. But the two together have a somewhat larger one this year than in any previous year. It is noticeable that New York's smallest percentage was precisely in that year when its railroads were contending to establish rates as low to that city as to Philadelphia or Baltimore.

Usually New York improves its position materially while navigation is open; it then having one more feeder than the other cities, and at that time of the year a more important one than any railroad. But this year the canal receipts have not advanced New York's position as much as usual. During the winter of 1877 it had received but 31.4 per cent. of the total, while at the end of August it had 41.4, and at the end of August its receipts were 6.5 per cent. more in 1878, but only 3.4 per cent. more in 1879 than during the winter. This is not because of a falling off in canal receipts, but because the canal receipts have become a much smaller proportion of the total than formerly.

They have been sometimes as much as 25 per cent. of the total, and last year were more than 20 per cent.; but what was 20 per cent. of last year's receipts makes only 17½ per cent. of this year's. That is, one of the feeders of New York, and what has heretofore been its chief feeder, does not now much increase its business, while all the feeders of all the other cities do.

The crop year for the seaboard ports is usually made to close with August, which is not so near the truth now as formerly, when nearly all grain moved by water, and shipments of the first week of August did not reach the seaboard until the end of the month. Very little new spring wheat now reaches the seaboard until September, but a good deal of winter wheat; nearly all the oats and, of course, all the corn that arrives in August is of the previous year's crop. The receipts of flour in barrels and of the different grains in bushels at the seven Atlantic ports for the year ending with August have been:

	1879.	1878.	1877.	1876.
Flour.....	10,886,648	9,803,757	8,304,312	9,873,505
Wheat.....	131,563,478	92,293,155	25,565,156	51,597,531
Corn.....	101,983,595	103,642,647	85,831,613	75,121,094
Oats.....	23,803,199	23,748,029	18,794,429	24,823,020
Barley.....	5,341,180	10,030,800	7,234,137	6,632,133
Rye.....	4,835,955	4,529,245	2,843,883	1,210,250
Total grain.....	267,527,413	237,614,476	140,269,478	156,384,937
Flour to wheat.....	54,433,240	49,018,785	41,521,560	49,367,525
Flour and grain.....	321,960,653	286,633,261	181,791,038	205,752,462

The receipts from the crop of 1878, therefore, have been 12½ per cent. greater than from the crops of 1877—a most excellent one; 77 per cent. greater than those from the crop of 1876—a very poor one, and 57 per cent. greater than those from the crops of 1875.

The crop of 1878 was the best that had been known for winter wheat, but the failure of spring wheat in Minnesota and adjoining districts was so much more talked of, that doubtless many who do not watch the business supposed the whole wheat crop to be below the average. But the above table shows that the increase was wholly in wheat, and was truly enormous. Including flour, the wheat receipts amounted to 186,000,000 bushels against 141,300,000 the previous year, which is an increase of 44,700,000 bushels, or 31½ per cent., over the largest receipts ever known heretofore. Moreover, the California crop was large in 1878 and small in 1877, and that is not included in these figures. So rapid an increase in the available surplus of wheat is an indication of what the country can do if a demand is made upon it.

The aggregate weight of the receipts of the last year was 8,535,565 tons, which is equivalent to a daily delivery of 2,626 10-ton car-loads, or 87½ 30-car trains, every working day in the year. Nearly three-fifths of this freight is supplied by the wheat crop (in the form of wheat and flour), and one-third by the corn crop. But the movement of wheat fluctuates much more than that of corn. When the crop is short, we consume most of it at home. Of the wheat crop of 1876, for instance, less than 1,600,000 tons of wheat and flour reached the seven Atlantic ports, against more than 5,000,000 tons from the crop of 1878; but the corn receipts for four years have varied only from 2,103,000 to 2,986,000 tons, and have often been larger than the wheat and flour receipts.

From present appearances it would appear that this country will have as much wheat to spare from the crop of 1879 as from the crop of 1878, and perhaps more; and there is every prospect of a much larger corn crop, which in a very few days will be out of danger from early frosts. As the European crop appears to be on the whole worse than last year even, there is likely to be as good a demand for our grain as last year, and some increase, possibly a considerable increase, over the enormous business of last year seems probable. If rates are maintained through the winter, even at the present figures, the business can be made much more profitable to the carriers than last year's business was, fully one-half of which was probably carried to the sea-board for 900 or 1,200 miles wholly without profit or at a loss. But the Western roads—a very large and important part of our system—always profit by a large grain crop; they did last year and the year before, and they will this year.

Grain Shipments by Lake and Rail.

For the time since navigation has been open this year, that is, from April 26 to Sept. 30, 18 weeks, the shipments of grain of all kinds from the eight reporting Northwestern markets, by lake and by rail, have been as follows for six years:

Year.	By lake.	By rail.	Total.	P. c. by rail.
1874.....	47,990,913	15,072,653	63,063,566	23.9
1875.....	38,084,590	17,385,777	55,470,367	31.3
1876.....	37,248,590	30,551,816	67,800,376	45.1
1877.....	42,789,718	14,317,208	57,106,926	25.1
1878.....	52,869,524	23,401,331	76,270,855	30.7
1879.....	54,904,358	36,249,460	91,153,818	39.8

Two things prevent this table from showing the general course of rail shipments and their proportion

to lake shipments: one of these is the fact that the time covered is only that of open lake navigation. As the railroads are the only carriers usually for five months of the year, of course the proportion of the yearly shipments carried by them has been much greater than is shown above. But not only is this proportion greater for the year than for the 18 weeks above, but it is an increasing proportion, for the railroads carry vastly more now in the winter than they used to. We showed in our issue of May 16 how the shipments of the Northwestern markets had increased during the 21 weeks that lake navigation was closed. There was an extraordinary business in the winter of 1878-79, but it amounted to but 29,500,000, while in 1877-78 it was 44,500,000, and last winter 40,400,000. But at last it appears that the summer shipments per week have become as large as the winter shipments. The average shipped from Northwestern markets by rail per week during the 21 winter weeks ending April 27, and during the 18 weeks of open navigation ending Aug. 30 have been as follows:

	Winter average.	Summer average.
1874.....	1,404,731	837,370
1875.....	885,003	905,876
1876.....	1,418,922	1,697,323
1877.....	1,266,082	795,400
1878.....	2,117,806	1,300,074
1879.....	1,922,739	2,013,859

Thus only once in any winter have the roads had a larger average grain business than during the present season of open navigation, when they have carried more than the last winter, although the competition was fiercer before than after navigation, and the rail rates, as far as can be ascertained, averaged rather lower than since they have been affected by the lake competition.

During most of the period since navigation closed the railroads have been carrying at agreed rates, but part of this time they were excessively low, and for a considerable time a large proportion was carried on contracts at excessively low rates, even after rates had been advanced for new business. Rail shipments were heaviest at these excessively low rates, doubtless. For the five weeks ending June 21 they varied from 2,180,000 to 3,065,000 bushels weekly, and averaged 2,640,000. Since that date they have never been so much as 2,000,000 bushels, but they were very nearly in the last week of August, with rates the highest of the season.

The result seems to show that with lake and canal rates as high as they have been since June last, the railroads can depend upon getting from these markets 1,200,000 to 2,000,000 bushels weekly, at rates from 20 to 25 cents per 100 lbs. from Chicago to New York. We do not qualify this by the aggregate amount to be moved, for we may assume that lake rates will not be as high as they have been since June—unless the pressure of the shipments is about as great as it has been this year.

Wherein this table most fails to show the aggregate and the proportion of the rail shipments is in its confinement to the eight reporting Northwestern markets. As we have shown repeatedly, a larger and larger proportion of the grain now comes through by rail without stopping or being reported at any of these markets, and much of it without passing through them. Thus during the 21 winter weeks, the Atlantic receipts were 38,300,000 bushels greater than the shipments of the eight Northwestern markets, while they were but 11,500,000 greater in 1874, and 5,000,000 greater in 1875; and during the 18 weeks above recorded since navigation opened this year, the receipts at Atlantic ports have been 18,000,000 bushels greater than the shipments from the Northwestern markets. Last year they were 19,000,000 greater; in 1877 they were 24,000,000 bushels less; in 1876 they were but 2,400,000 bushels more. We have besides this the large shipments for consumption at interior Eastern points, which are made chiefly by rail, so that the aggregate of the rail business, though not ascertainable exactly, is evidently much larger than appears from our first table, which indeed chiefly shows what the course of shipments has been when exposed to the full effect of lake and canal competition.

But something else is shown which is of no slight importance, and that is the course of lake shipments. Though the railroads have been increasing the quantity which they carry during navigation, they can hardly be said to have taken the business from the lakes, or they have done so only exceptionally, as during the railroad war of 1876. The lake has not kept its old proportion of the business, but it has maintained and even increased the amount. For the 18 weeks since navigation opened, the lake shipments this year have been larger than in any corresponding 18 weeks, and an eighth larger than in 1874, when they were, until August, at least, unusually large. It seems rather that the vessels get their business first, and the railroads take what is left; only of late years there has

been much more left. The rates, since 1873, have not been, on the average, sufficient to encourage the enlargement of the fleet, as the total grain business has grown; but it has been pretty well kept up—that is, in carrying capacity; for the small sail vessels are largely replaced by propellers with large barges, which not only carry more per trip, but make more trips than the vessels which they succeed. And the vessels seem pretty sure to get cargoes when there is any grain to carry, whether the railroads do or not. We find that when necessary they have carried for weeks at 1½ cents a bushel for corn from Chicago to Buffalo—more than one-half of the rail distance from Chicago to New York. With the elevator charge common when rates are so low, this is equivalent, for that part of the distance, to about 7½ cents per 100 lbs. from Chicago to New York, which no one will be crazy enough to claim to be anything like the cost of carrying by rail, and which is actually, we are sure, less than one-half of the cost.

It does not appear, then, that the railroad competition, so long as it is limited in rates to the cost of transportation, is likely to lessen greatly the lake grain movement. It simply prevents its increase. It is, too, effective largely in proportion to the distance of the new grain fields from the lakes, or rather of the difference between the through rail route from such fields and the distance by rail to the lakes and thence by water. Kansas grain, for instance, may find a direct rail route to the East which passes 150 miles south of the lakes, and it must go considerably out of the direct route to reach the lakes. Minnesota, Dakota and Manitoba, on the other hand, can hardly send their grain to New York or Baltimore without passing within sight of Lake Michigan or Superior. The lakes evidently, are likely to get a larger share of the grain from the northern than from the southern district.

Pacific Routes and Traffic.

A new route to the Pacific is spoken of in a telegram from St. Louis as being proposed by a combination of the Pennsylvania's lines east of St. Louis with the Missouri Pacific and the Atchison, Topeka & Santa Fe. As the last-named road has some hundreds of miles to go before it can reach the Pacific, or a connection to the Pacific, the "new line" cannot be expected to have an immediate effect; but the astonishing thing is that any one should suppose any combination to be necessary of lines east of the Atchison, Topeka & Santa Fe, in order to get a share of the business over it. That road, like all other roads, takes, and must take, whatever freight is brought to it by any and all roads, and is certainly glad to get it, whether it comes by the Missouri Pacific, by the St. Louis, Kansas City & Northern, a "Gould" road, a "Vanderbilt" road, or John Smith's road. Such an outcry was made over the "Wabash combination" for Pacific business that it seems to have been assumed by many that the Union Pacific is at liberty to accept or reject freight brought to it at Omaha at its will; refuse it if it comes by one line, and give special rates on it if it comes by another. There never has been anything in the way of a line, however made up, getting a share of the shipments consigned from the East over the Pacific roads except the difficulty of finding roads to make a line, and the further difficulty of getting freight consigned by such line. When the Omaha line of the St. Louis, Kansas City & Northern is completed, there will be a reasonably short line by way of the Wabash and Hannibal, which will doubtless get a share of the traffic; and when the Atchison, Topeka & Santa Fe and the Southern Pacific are completed to a junction, there will be a line from Atchison and Kansas City to the Pacific, and all routes from the East to Atchison and Kansas City will be able to compete for a share of its traffic. Two of the three lines from Chicago to Omaha have also lines to Atchison and Kansas City, and the Union Pacific will not then be nearly so independent as it now is, and may be exposed to a very severe competition, such as will materially reduce the rates between Omaha and Ogden. The Central Pacific is not likely to suffer from such competition, because its owners also own the Southern Pacific, and will have no motive for pro-rating on rates reduced to divert traffic from the other road. Their policy would seem to be to insist on such rates as will give them the same profit by either road. Current rates leave a considerable margin of profit, and any share of the transcontinental traffic will be so much addition to the Atchison road's income, so that it will be sure to compete for it so long as the rates are high enough to more than cover expenses. The alternative to a considerable reduction would seem to be an agreed division of the traffic between the two roads; but of course this would give some share of the earnings and profits to the Atchison and take them from the Union Pacific. The latter is bound to lose something by the completion of a new transcontinental line, either by a division of the traffic or a reduction of the rates, and without a combination, by both. The Central Pacific proper, of course, will lose similarly in traffic, but as the lessee of the Southern Pacific (if the lease is continued) it will gain on that line what it loses on its own, and may be comparatively indifferent to the matter, until an independent through line is opened, like the Northern Pacific, which, however, is too far north to compete for the transcontinental traffic on equal terms. Only a very small

part of this traffic crosses the Pacific. By far the greater part comes from California, and most of that from the vicinity of San Francisco and Sacramento. On the other hand, the Northern Pacific will have the same advantage for Oregon traffic that the Central and Southern Pacific have for California traffic, and the Oregon traffic, though not very large now, is growing. It can connect by steamers with San Francisco and other California coast points, with the result, probably, of reducing considerably those through freights which are now most profitable—that is, on the higher classes. A good deal of the through freight now is taken with a very narrow margin of profit, in competition with vessels, as is natural when we consider that most of the freight now shipped from California cannot afford to pay any rates that the railroads can afford to accept, and so goes by sea around Cape Horn. Half a cent per ton per mile on wheat from San Francisco to New York would be equivalent to just about half a dollar a bushel; and wheat must be much higher than it has been of late years to stand such a rate for carrying it half way to its market. The vessels carry it all the way to Liverpool for 32 cents a bushel, or less, usually. The roads on the Pacific slope make their profit from the wheat crop, not in carrying it to Atlantic ports, but in carrying it to Pacific ports to be shipped; and the Pacific railroads get, and must get, most of their east-bound traffic, not from their termini, but from the country on their lines. This is true of the through traffic, the San Francisco traffic, of the Central Pacific. Most of what it carries from San Francisco it originally carried to San Francisco, in some form, from interior points in California.

New York Railroad Incorporations.

An interesting and new feature in the New York State Engineer and Surveyor's Report on Railroads for 1878, which we reviewed recently, is a table of all the railroad incorporations ever made in the state down to the date of the report. This, in connection with the record of the dates of opening the railroads and parts of railroads that have been constructed, gives a good deal of valuable historical information and affords occasion for reflection on the mortality of corporations, the vast number of "organizations" made to do comparatively little work, etc.

The first railroad company incorporated in the state was the "Mohawk & Hudson," chartered in 1826, whose road was opened in 1831, whose name was changed to "Albany & Schenectady" in 1847, and which was consolidated into the "New York Central" in 1853. In 1828 six companies were incorporated, of which four are extinct. The others were the "Hudson & Berkshire," which completed the New York end of the Boston & Albany in 1842; and the "Ithaca & Owego," which completed the road between those places in 1834. Of five companies incorporated in 1829 and 1830, only one, the Canajoharie & Catskill, ever built any road, and this was abandoned many years ago.

Of five companies incorporated in 1831, the New York & Harlem and the Schenectady & Saratoga built their road. The latter was opened in 1832, but the former was very slow in getting constructed, a mile being opened in 1832, a mile in 1833, two miles in 1834, none then for two years, and the final two miles which completed it to the Harlem River only in 1837.

In 1832, which was the year after the first railroad in the state was opened, no less than 24 railroad companies were incorporated. Of these 18 died and left no sign. Of the other six, the Rensselaer & Saratoga was the first to get any road done (25 miles in 1835—three years after); the Tonawanda opened 44 miles west of Rochester and the Brooklyn & Jamaica the west end of the Long Island Railroad, two years later; it was in 1841, or nine years after the incorporation of the company, that the first section (41 miles) of the New York & Erie was opened; while the Watertown & Rome, organized in this year, 1832, did not get itself built until 1850, and the Buffalo & Erie not until 1852. This seemed to supply the demand for railroad corporations pretty well for some time, for only five were organized in 1833, ten in 1834, and one in 1835. Of the 16 companies incorporated in these three years, eight built some road. With 1836 came the era of speculation. In that year 41 companies and in 1837 15 were incorporated. Only eight of these built any road, but six of these eight built parts of what afterward became the New York Central Railroad between Albany and Buffalo. They did not build their roads in these years, however. Still these were years of extraordinary construction for those times, never equaled before, and not afterward until 1842. After 1837 we have four incorporations each in 1838 and 1839, one each in the three succeeding years, and none in 1844. One of the eleven companies incorporated in these six years built its railroad—the Oswego & Syracuse—which was opened in 1848. After 1844 the number of new corporations varied from one to 16, until 1852, when there were 26; there were 24 in 1853, but from that time there was not so great a number again until during the war; but beginning with 1863, the numbers have been:

Year.		Year.	
1863.....	24	1871.....	50
1864.....	32	1872.....	61
1865.....	24	1873.....	36
1866.....	42	1874.....	33
1867.....	34	1875.....	17
1868.....	43	1876.....	21
1869.....	40	1877.....	35
1870.....	48	1878.....	27

The character of the times can be read in this list: the demand for corporations is greatest when it is easy to get money for new enterprises. But of the 443 companies organized from 1863 to 1873, both inclusive, no less than 223 are already extinct, 21 have abandoned their projects, and 17 others have no road in operation. Those organized since

1873 have generally not had time to become extinct. Of the whole number (183), 30, as near as we can learn, have built road, or road has been built by companies which have absorbed them.

Foreign Railroad Notes.

The Austrian and Hungarian railroads are now obliged to publish in a designated newspaper all rebates and other special favors granted in freight transportation.

The St. Gothard Tunnel at the close of 1878 had been excavated for a distance of 12,199.5 meters, or 7 miles, 3,070 feet. At the end of March it had been excavated 900 feet further.

The Prussian Minister of Public Works has recently issued a statement of the requirements which will be conditions of chartering "secondary" railroads. Among these is one which binds the chartered company to lease its road to a connecting line for a yearly rent equal to the average net earnings of the previous five years, if it amounts to as much as 4½ per cent. on the capital invested, in case the Minister of Public Works declares it to be for the public interest.

The Prussian Minister of Public Works has taken measures for the establishment of a "railroad museum," to consist of drawings, models, and objects used in railroad construction. The German Railroad Union had long had in view the formation of such a museum.

One of the principal Prussian railroads (the Lower Silesian & Märk) reports its axle breakages for the past twelve years. The number of axles in use was 10,601 in 1867 and 18,161 in 1878. In 1867 one axle was broken; in the eleven years since none has been broken—an experience which can hardly be matched anywhere else in the world, we imagine.

According to the report of Mr. E. B. Martin concerning boiler explosions in England in 1878, there were four explosions of locomotive boilers that year, causing the death of one person and the wounding of three. In the United States in 1878 there were twelve locomotive boiler explosions. Though there were nearly five times as many miles of railroad in the United States, the number of locomotives was but about 16,500, as against 13,500 in Great Britain.

The Tunnels on the Dom Pedro Segunda Railroad.

Just before Mr. W. Milnor Roberts left this country for Brazil we published a paper by him, in which he spoke of the Emperor of Brazil passing through the hole in the "big tunnel" (No. 12) of the Dom Pedro Segunda Railroad of Brazil. Shortly afterward, but just after Mr. Roberts had sailed for Brazil, we published a letter from Mr. Joseph Patterson, contradicting this statement and also another in Mr. Roberts' paper, which spoke of "Mr. Boyd" as in charge of that tunnel. Mr. Patterson claimed that he was himself in charge of tunnel No. 12.

Writing from Brazil, under date of May 1 last, to the Secretary of the American Society of Civil Engineers, Mr. Roberts says that some one had told him of Mr. Patterson's letter, but he had not seen it. He explains the matter as follows:

"My attention being thus officially directed to the matter, I now recall the incident as belonging to tunnel No. 11 (which was also a shaft tunnel), on which "Mr. Boyd" was foreman, instead of tunnel No. 12 (the big tunnel), upon a portion of which Mr. Patterson was foreman, though he was not there all the time. I regret that I should have made the mistake, and I am sorry not to have seen Mr. Patterson's article, or my own. He was a good tunnel manager, and rendered excellent service in the re-tunneling of tunnel No. 3, which had caved in."

Record of New Railroad Construction.

This number of the Railroad Gazette contains information of the laying of track on new railroads as follows:

Shenandoah Valley.—Extended from the West Virginia line to Berryville, Va., 4½ miles.

Baltimore & Hanover.—Extended from Hampstead, Md., southeast 2 miles.

St. Louis, Kansas City & Northern.—On the Omaha Extension track is extended northwest to Marysville, Mo., 27 miles. Also, track is laid from Council Bluffs, Ia., southeast 27 miles.

Chicago & Northwestern.—Track has been laid on a branch of the Maple River line from Wall Lake, Ia., north to Sac City, 12 miles. Also, track is laid on the Chicago & Dakota line from Tracy, Minn., westward 40 miles.

Southern Minnesota Extension.—Extended from Jackson, Minn., westward 38 miles.

Nashville & Tuscaloosa.—Extended from Bon Aqua Springs, Tenn., southward 10 miles. Gauge, 3 feet.

Louisiana Western.—Track laid from Lake Charles, La., east to English Bayou, 7 miles.

Helena & Iron Mountain.—Track laid from Bushville, Ark., northwest to Sale's Place, 6 miles. Gauge, 3 ft.

Waxahachie Tap.—Extended westward to Waxahachie, Tex., 7 miles, completing the road.

Cumberland & Ohio, Southern Division.—Extended southward to Campbellsville, Ky., 8 miles.

Central Branch, Union Pacific.—On the Southern Branch track has been laid from Downsview, Kan., west by south to Osborn, 10 miles.

This is a total of 198½ miles of new railroad, making 1,798 miles thus far this year, against 1,160 miles reported for the corresponding period in 1878, 1,176 in 1877, 1,467 in 1876, 702 in 1875, 1,006 in 1874, 2,455 in 1873 and 4,498 in 1874.

THE COMBINATION OF THE CANADA ROADS appears not to be making rapid progress, in spite of the resignation of Mr. Childers, the President of the Great Western, who was

supposed to be the chief obstacle in the way. Col. Grey, the Vice-President, also objects to dividing the total earnings, which would make his company interested in increasing the Grand Trunk's earnings between Toronto and Montreal and Montreal and Portland, as well as those between Detroit and Buffalo. But Sir Henry Tyler appears to insist on having his own way in every particular, and he also seems to have very strong support among Great Western as well as Grand Trunk share-holders. Doubtless his plan is the best one for the Grand Trunk, but that it is best for the Great Western is much more questionable, and cannot be decided without considering a number of matters not capable of being estimated exactly, such as the probable loss of business to the Great Western by a combination hostile to the New York Central and the Michigan Central, the probable gain to the Grand Trunk by the active coöperation of the Great Western, and the share of the earnings that may be allotted to each. If the Great Western becomes substantially a part of the Grand Trunk, competing for business at Chicago with the Michigan Central by the Grand Trunk's Chicago road, now under way, it is not probable that the Michigan Central will work in connection with it any more than it can help, but that eventually the Michigan Central and the Canada Southern will form one line, and the latter get pretty much all the Michigan Central business, more than half of which now goes to the Great Western. The latter would be independent, doubtless, as it never has been before, having its own line to Chicago and its own line to the sea-board. But independence with 500 tons of traffic per week may not be preferable to dependence with a thousand tons per week. It never has been in a very satisfactory situation, but it is possible for it to get into a worse one.

The interests of the Erie as well as the New York Central are opposed to any arrangement which will tend to take the Great Western's traffic eastward by way of Toronto instead of by Buffalo and Suspension Bridge. It must be remarked, however, that a general diversion of its traffic to Toronto is not possible; it won't go that way. The Grand Trunk itself has a line from Detroit to Buffalo which has some traffic, although it was for the interest of the Grand Trunk to have all the traffic possible go to Toronto and Montreal, while the roads east of Buffalo were not likely to favor the Grand Trunk line, preferring to support one which carried all its traffic where they would have a chance of getting it.

THE BRITISH RAILWAY COMMISSION seems to be the subject of very general misapprehension in this country, even by those accustomed to study railroad legislation pretty closely. We remember to have seen it credited with the power of making railroad rates, and Mr. Robert Toombs, in the very interesting letter to the Atlanta Constitution intended to affect the action of the Georgia Legislature, which we copy elsewhere, seems to have confounded its functions with those of the Massachusetts Commission; at least he ascribes to it the powers and qualifications of both these bodies. We have tried to emphasize the fact that the British Commission is a court, which hears and tries cases much like another court, but many of a character which ordinary courts do not try. It has nothing to do with collecting general information concerning railroads, or investigating general railroad questions, except so far as such questions arise in the hearing of cases brought before them by the complaint of some one; and it does not recommend legislation. In fact, there is scarcely anything that our American commissions do which is done by the British Commission, though the Massachusetts Commission has made some public investigations which might be compared with the British cases, though the former, we believe, cannot make decisions which have the force of a decision by a court of law. And it is not easy to see how the functions of the two commissions would be compatible in a single body. The American commission is expected to represent the people, to watch and study railroad business especially, though not exclusively, in their interest, and to supply facts and opinions that may serve as a basis of rational and effective legislation in the public interest. We do not expect a court to do such work. But we are strongly inclined to think that a court like the British Commission might serve a useful purpose in this country, in cases between railroad companies as well as in cases between the railroads and the public, especially if it were made to take cognizance of agreements between the railroad companies such as are not now enforceable by law.

THE LEASE OF THE ATLANTIC & GREAT WESTERN TO THE ERIE seems to be given up, or at least indefinitely postponed. The opposition to it in England was sufficient to make it hard to raise the new capital required to complete the foreclosure, which was to be a preliminary of the lease. But the representatives of the opposition to the lease did not recommend a conflict with the Reorganization Trustees, but agreed with them to recommend the pending plan, to which there appears to be no opposition, by which the company is to reorganize independently, and then do whatever may appear best—work the road on its own account or accept the best offer for a lease. It is possible that there have been some assurances that as good terms can be had as were offered by the Erie, from another and a stronger company. The greatest obstacle to carrying out the current plan is the raising of the money to pay Receiver's debts, the Ohio mortgage and similar indispensable expenditures. This money could have been raised on much easier terms if it had been secured by the guarantee of some other solvent company. The loan recently offered in England is little more than will be needed to pay the foreclosure expenses (chiefly Receiver's debt), and the part that is to be used for paying off the Ohio mortgage is to be issued

later, doubtless with the hope that when reorganization is completed the company will have better credit.

THE SOUTHWESTERN RAILROAD WAR seems likely now to be brought to a close. Representatives of the different lines are now in session in New York, and a preliminary arrangement has been made under which we suppose that rates will be advanced immediately. As the terms of a settlement remain to be agreed upon, of course it is not certain that peace will be made finally; but it is altogether probable. In such affairs it is the first step that costs.

WATER RATES have scarcely changed at all during the past week, and what fluctuations there were have been very slight. Latest advices from Chicago say that contracts for carrying through to New York by lake and canal were made at 11½ to 12 cents a bushel for corn and 13 to 13½ for wheat, the rail rate being 16.8 cents for corn and 18 for wheat. The railroads, with these differences, have their cars fully occupied.

THE STEVENS INSTITUTE OF TECHNOLOGY seems to supply a considerable proportion of its students to the railroad shops, where, it is to be hoped and expected, they will both learn and teach. The latest catalogue shows that of the class of 1878 nine out of 20 are in railroad or locomotive shops; three out of 10 of the class of 1877, four out of 17 of the class of 1876.

NEW PUBLICATIONS.

The Law of Eminent Domain. By Henry E. Mills. St. Louis, F. H. Thomas & Co.

A law treatise, embracing, comprehensively, the subject of taking private property for public use; in what cases and by what proceedings it may be done. The constitutional rule, familiar to all, that private property cannot be taken for public use without just compensation, has been the author's guide in determining the scope of his undertaking. He treats of the condemnations of property for all the various uses, bridges, canals, ferries, highways, parks, railroads and the like, when the authority of the state is exercised either directly or by delegation to a corporation; but excludes the somewhat similar subjects of lands acquired by dedication or prescription, and assessments for benefit conferred on lands by local improvements in cities.

The opening chapters give general explanations as to what is the nature of this power of eminent domain, and what uses are public, what private. The chapters next following embrace topics which are of interest to promoters of new railroad enterprises, as well as to lawyers; such as occupying highways by railroad tracks; taking franchises of one company or its property, for use of another; taking extra land for turnouts and stations, also materials for construction and repair; delegating the power to railroad corporations; settling conflicting interests where infants, married women, tenants, trustees, etc., are concerned; and interference with streams. The remainder of the volume is devoted to the proceedings to take land and assess damages, and will serve the legal profession more particularly. Accuracy of citations we will leave to the judgment of legal critics; but the volume appears concise, comprehensive, lucid and trustworthy.

General Railroad News.

MEETINGS AND ANNOUNCEMENTS.

Meetings.

Meetings will be held as follows:
Louisville & Nashville, annual meeting, at the office in Louisville, Ky., Oct. 1. Transfer books will close Sept. 25.
Indianapolis, Decatur & Springfield, annual meeting at the office in Indianapolis, Oct. 9, at noon.
Northern Pacific, annual meeting, at the office, No. 23 Fifth avenue, New York, Sept. 24, at noon. Transfer books closed Sept. 6.

Railroad Conventions.

The National Association of General Passenger and Ticket Agents will hold a special meeting at the Windsor Hotel, New York, Friday, Sept. 12, beginning at 11 a. m., and this meeting will take the place of the regular half-yearly meeting that was to have been held in Louisville, Sept. 16.

The Order of Railroad Conductors will hold its twelfth annual convention, in New York city, beginning Oct. 7. The meetings will be held in the building No. 300 Eighth avenue.

The General Time Convention will hold its regular fall meeting at the Windsor Hotel, New York, Oct. 9.

The Southern Time Convention will hold its fall meeting at Barnum's Hotel, Baltimore, Oct. 15.

Dividends.

Dividends have been declared as follows:
New York Elevated, 2½ per cent., quarterly, payable Oct. 1.
New York Central & Hudson River, 2 per cent., quarterly, payable Oct. 15. Transfer books close Sept. 15.
Lehigh Valley, 1 per cent., quarterly, payable Oct. 15. Transfer books close Sept. 20.
Chicago & Northwestern, 1½ per cent., quarterly, on the preferred stock, payable Sept. 27. Transfer books close Sept. 17.
Western Union Telegraph, 1½ per cent., quarterly, payable Oct. 15.

Mail Service Extensions.

Mail service has been ordered over railroad lines as follows:

Kansas Pacific, service ordered over the Salina & Southwestern Branch from Salina, Kan., to Lindsborg, 21.1 miles.

Foreclosure Sales.

The Logansport, Crawfordsville & Southwestern road was sold in Indianapolis, Sept. 10, under a decree of foreclosure, and bought for \$315,000 by John G. Williams, for account of the Terre Haute & Indianapolis Company. The line owned extends from Logansport, Ind., to Rockville, 93 miles, and an extension from Rockville to Terre Haute, 22

miles, is leased. The funded debt consists of \$1,500,000 first and \$500,000 second-mortgage bonds.

The Springfield, Jackson & Pomeroy road will be sold in Springfield, O., Oct. 1, under a decree of foreclosure granted by the Clark County Court of Common Pleas. The road is appraised at \$321,000 and equipment at \$31,411, and they will be sold together or separately. The purchaser will be required to pay \$50,000 cash, the balance being receivable in bonds and unpaid coupons at their *pro rata* value. The bonded debt is \$900,000; the road extends from Springfield, O., to Jackson, 108 miles, with a branch from Jackson to Eureka, five miles. The use of five miles of the main line, from Washington Court House west, is leased from the Dayton & Southeastern. The road is of 3-ft. gauge.

The Wilmington, Columbia & Augusta road will be sold in Wilmington, N. C., Oct. 1, under a decree of the United States Circuit Court. The sale will include the entire property and the purchaser must pay \$30,000 cash, and the balance in three equal installments at three, six and nine months, purchasers to have the right to use bonds and coupons at their *pro rata* value in payment of all except the \$20,000 cash. Purchasers must assume payment of all outstanding debts and obligations of the Receiver. The road extends from Wilmington, N. C., to Columbia, S. C., 189 miles; its bonded debt by the latest report was \$4,248,000, with a floating debt of \$1,008,000.

New York Legislative Investigation of Railroad Practices.

A sub-committee from the special committee of the New York Assembly met in Albany, Sept. 9, for the purpose of taking further testimony. There were present Messrs. Noyes and Terry, of the committee. Henry S. Marcy, General Freight Agent of the Delaware & Hudson Canal Company, appeared for that company, the Hon. H. Smith acting as his counsel. Mr. Marcy was asked as to the special rates of his company. He said there were two elements embraced in those rates, viz., the effect of the revenue on the company and the necessity of the shippers who made the application. He also said that the company's heavy business was nearly all done at special rates. The lowest rate the company gave was on lumber. It gave it on account of competition.

On account of the absence of Mr. Sterne, counsel of the committee, an adjournment was taken until Sept. 10. The committee sent a request to President Dickson to be present. The sub-committee which was to meet at Rochester will not meet this week.

On Sept. 10 the examination of Mr. Marcy was continued, and he produced the papers relating to special rates asked for by the committee. He testified further, at some length, as to special local rates and as to rebates allowed on oil. A few questions were also answered as to milk business.

The sub-committee adjourned until Sept. 11, when Mr. Marcy's examination was to be concluded.

September Meeting of Joint Executive Committee.

The following "Circular, No. 90, east bound," has been issued from the office of the Joint Executive Committee, No. 346 Broadway, New York, dated Sept. 8, 1879:

Notice of Meeting of the Joint Executive Committee, Sept. 23, 1879.—Notice is hereby given that the next monthly meeting of the Joint Executive Committee will be held at the office of the Committee, No. 346 Broadway, New York, at 11 o'clock, on the 23d inst.

At the suggestion of several members, it is proposed that these meetings will be held hereafter monthly, on the third Tuesday in each month, as provided for in Article 9 of the organization. The subjects which will be considered at the meeting on the 23d inst. are:

1. *Completing the agreements between the terminal roads at points at which a division of traffic has been and is to be made.*—Divisions have already been agreed upon at Chicago, St. Louis, Indianapolis and Louisville. The division at Peoria has been referred to the Board of Arbitration. No division has as yet been made at Terre Haute, Vincennes, Lafayette, Toledo, Detroit, Quincy and Burlington. The representatives of the terminal roads at these points are invited to attend the meeting on the 23d inst. for the purpose of agreeing upon these divisions.

2. *Sub-divisions between the connecting roads of the terminal roads.*—It is important that the intermediate roads should agree upon the proportions of traffic to be carried by them, in order to remove all motive for cutting rates on the part of these roads.

3. *Revision of Percentages on which East-bound Rates are based.*

4. *Revision of Lumber Rates from the West and of Cotton and Tobacco Rates.*

5. *Abrogation of Contracts.*—Many of the contracts reported to the Chairman stipulate that they are good only so long as certain contracts exist by some other line. Most, if not all, of these contracts can, therefore, be abrogated by joint action, and this should be done, as far as possible, at the next meeting.

6. *Division of West-bound Traffic.*—Revision of the division of St. Louis, Missouri & Texas traffic; division of traffic to Mississippi River points; division of Peoria traffic; division of west-bound traffic from Buffalo; division of traffic to points west of Missouri River.

Representatives of the roads interested in the above divisions should come prepared to agree upon the same.

7. *Consideration of the means for maintenance of passenger rates.*—The reports to be made by the convention of general passenger agents to be held on the 11th inst., will be submitted to the meeting on the 23d, for its action. In addition to the above, any subjects relating to the business of the Joint Executive Committee may be brought before the meeting. Please inform me as soon as convenient whether your road will be represented at the meeting.

ALBERT FINK, Chairman.

Railroad Passenger & Traveling Agents' Association.

The annual convention of this Association met at the Girard House, Philadelphia, Sept. 10. The morning session was devoted to routine business. In the afternoon officers were elected and the retiring President delivered his annual address. It was decided to take an excursion to Long Branch Sept. 11, and to go to New York the following day and there adjourn.

Brotherhood of Locomotive Firemen.

The annual convention opened in Chicago, Sept. 8. The opening public exercises were largely attended and were very interesting. The convention then went into a private business session, which will last several days.

Railroad Claim Agents' Association.

The third annual convention of this Association met in Philadelphia, Sept. 10. Mr. E. Darrach, of the Philadelphia & Reading Railroad Company, presided. Representatives were present from the Baltimore & Ohio, the Lehigh Valley, the Central of New Jersey, the Pan Handle, the Wabash, the Union Line, the Philadelphia & Reading, the Pittsburgh & Lake Erie, the St. Louis, Iron Mountain & Southern, the Kansas City, Fort Scott & Gulf, and the Kansas City, St. Joseph & Council Bluffs Railroads. Committees were ap-

pointed on officers, on finance, and on order of business. After reading a number of letters, which were referred, a recess until 3 o'clock was taken.

At the afternoon session, officers were elected. The rules of the organization were then considered, and a report was to be made the next day. Indianapolis and the second Wednesday in September were fixed as the place and time of the next meeting.

ELECTIONS AND APPOINTMENTS.

California Railroad Commission.—The election in California resulted in the choice of J. S. Cone, C. J. Beerstecher and Gen. George H. Stoneman as Railroad Commissioners. Mr. Cone was a Republican, the other two candidates of the Workingmen's party. Mr. Cone is a farmer of Tehama in the Sacramento Valley; Mr. Beerstecher a young lawyer of San Francisco, a German by birth but long resident in California; Gen. Stoneman is a graduate of West Point, formerly an officer in the army, but for some years past owner of a farm near Los Angeles. He is a member of the Board of Transportation Commissioners, which is superseded by the new Commission. The Board will have extraordinary powers.

Chicago & Alton.—This road is now divided into four divisions, with the following superintendents: A. M. Richards, Chicago Division; H. W. Stager, St. Louis Division; T. R. Bates, Jacksonville Division; J. H. Wood, Kansas City Division. Messrs. Stager and Bates are new appointments.

Chicago, Burlington & Quincy.—Mr. W. R. Crumpton has been appointed Superintendent of the St. Louis, Rock Island & Chicago Division, in place of Gen. N. J. Dana, lately appointed Assistant Commissioner of the Wabash and Cleveland, Columbus, Cincinnati & Indianapolis pool. Mr. Crumpton has been Assistant Superintendent of the division for a short time, and was before Division Freight Agent at Quincy for several years.

Cincinnati, La Fayette & Chicago.—Mr. G. G. Hadley having resigned the position of Assistant Superintendent, the office is abolished. Mr. H. H. Trowbridge has been appointed Master of Transportation and Superintendent of Telegraph, and all communications pertaining to these departments should be addressed to him.

Dallas & Wichita.—Mr. P. H. Barnett has been appointed Superintendent, in place of C. F. Stephens, resigned. Office at Dallas, Tex.

Denver & Missouri River.—The directors of the new company are: George L. Ordway, Denver, Col.; Cornelius S. Bushnell, Joseph A. Smith, New Haven, Conn.; John W. Kirk, Josiah C. Reiff, New York. Offices at Denver, Colorado.

Fond du Lac, Amboy & Peoria.—The officers of this road now are: A. Kinyon, President, Superintendent and General Freight Agent; William P. Wolf, Vice-President, Secretary and Assistant Superintendent; E. F. Foster, Treasurer; George P. Knowles, Solicitor; F. W. Froemake, Auditor; B. H. O'Meara, Assistant General Freight Agent; W. G. Wright, General Ticket Agent. Offices at Fond du Lac, Wisconsin.

Great Western, of Canada.—The following circular is dated Sept. 1:

"Mr. G. B. Spriggs has been appointed Traffic Manager of this company, and will on and after this date fill the duties of that office in addition to those of General Freight Agent."

Helena & Iron Mountain.—The officers are: President, Wm. Bailey; Secretary, S. J. Clark. Office at Helena, Arkansas.

Indiana, Bloomington & Western.—At the annual meeting in Indianapolis, Sept. 10, the following directors were elected: Austin Corbin, E. W. Bond, Gilbert Oakley, J. L. Devon, A. Sully, Giles E. Taintor, John P. Adriance, C. R. Williams, New York; James N. Campbell, Davenport, Ia.; R. E. Williams, Bloomington, Ill.; G. W. Gill, Worcester, Mass.; John L. Farwell, R. K. Dow, Claremont, N. H. The board organized by electing Austin Corbin, President; Giles E. Taintor, Vice-President; A. Sully, Secretary. The Executive Committee is composed of Messrs. Corbin, Farwell, Taintor, C. P. Williams and Sully. The total number of shares voted was 87,167. Of this number the Corbin interest voted over 75,000, while the opposition, or Bloom interest, voted about 11,000. This election substantially continues the present management.

Indianapolis & Springfield.—At the annual meeting in Indianapolis last week the following directors were chosen: John Lee, M. D. Wills, Gen. M. D. Manson, Thomas Nichols, Lee Hunt, David Ader, James Bridges, John R. Gordon, Geo. W. McCune, J. W. Nichols, A. K. Stark, Thomas N. Rice, Ferman Allen. The board re-elected John Lee, President; Thomas N. Rice, Vice-President.

Jefferson City & Southwestern.—The officers of this company are: President, W. A. Curry; Vice-President, J. S. Ambrose; Secretary, S. W. Cox; Treasurer, P. E. Chappell. Office at Jefferson City, Missouri.

Kansas Southern.—The first board of directors is as follows: H. L. Millard, W. H. Page, C. D. Ulmer, A. G. Landis, C. T. Daniels, Sterling, Kan.; A. W. Wickham, Salina, Kan.; J. P. Usher, Lawrence, Kan.; S. T. Smith, F. J. Lynde, J. W. Griffith, Kansas City, Mo.; D. M. Edgerton, St. Louis; Jay Gould, Russell Sage, New York.

Lake Erie & Western.—Mr. G. G. Hadley has been appointed Assistant Superintendent, with office in Fremont, O. He was formerly on the Cincinnati, La Fayette & Chicago.

Long Island.—From Sept. 1 the organization of the Road Department is as follows:

H. C. Moore, Road-Master.
Wm. J. Nicolls, Road Supervisor First Division, including the Long Island Road from Hunter's Point to Hindsdale; the Stewart line from Hindsdale to Belmont Junction; the North Shore Division from Hunter's Point to Whitestone and Great Neck; the Atlantic Avenue and Hempstead branches; office at Jamaica, N. Y.

Wm. Gilmore, Road Supervisor Second Division, including the Southern Division from Long Island City to Patchogue, and the Bushwick and Rockaway branches; office at Jamaica, N. Y.

F. H. Abbott, Road Supervisor Third Division, including the Long Island road from Hindsdale to Lakeland, the Port Jefferson and Locust Valley branches; office at Hicksville, N. Y.

C. McMinn, Road Supervisor Fourth Division, including the Long Island road from Lakeland to Greenport and the Sag Harbor Branch.

C. McLean, Foreman of bridges and buildings.

Manchester & Keene.—At a meeting held Sept. 6, Charles E. Page and F. V. Parker were chosen directors to fill vacancies. Mr. G. Y. Sawyer, Jr., was chosen President *pro*

tem., in place of Theodore H. Wood, resigned, and Charles E. Page was chosen Superintendent.

Mobile & Ohio.—The directors are now as follows: Wm. Butler Duncan, President; A. L. Rives, Vice-President; Cornelius L. Clark, James H. Fay, A. S. Gaines, Henry Hall, Jacob Hays, Adrian Iselin, Jr., W. E. Kimball, J. P. McMahon, W. H. Pratt, E. L. Russell, Moses Waring.

Nevada Central.—This company has elected the following officers: W. S. Gage, President; Robert L. S. Hall, Vice-President; James D. Negus, Secretary; Allan A. Curtis, Treasurer; James W. Boyden, Solicitor; Lyman Bridges, Chief Engineer.

New York & Oswego Midland.—Mr. Edward Minshall has been appointed Master Mechanic, in place of John Minshall, deceased.

Nodaway Valley.—The first board of directors is as follows: John F. Barnard, St. Joseph, Mo.; John A. Clark, Joseph S. Ford, George H. Nettleton, Kansas City, Mo.; Charles Merriam, Boston.

Northwestern Grand Trunk, Western Division.—The directors of this company, formed by the consolidation of the Chicago & State Line Company, of Illinois, and the State Line Extension, of Indiana, are: A. H. Dolton, J. J. Herick, Joseph Hickson, F. A. Howe, John McCaffery, L. J. Seargeant, J. H. Whitman.

Painesville & Youngstown.—This company was organized Sept. 3 by the bondholders who bought the Painesville & Youngstown Railroad at foreclosure sale, who chose the following directors: A. B. Cornell, James B. Ford, M. C. Martin, M. R. Martin, Christopher Meyer, N. B. Payne, Paul Wick. The board elected the following officers: President, Christopher Meyer, New York; Vice-President and General Manager, Miles R. Martin, Cleveland, O.; Secretary, A. B. Cornell, Youngstown, O.; Treasurer, Ralph K. Paige, Painesville, O.

General Manager Martin appointed J. A. Newcome Superintendent of Transportation; W. G. Hawkin, Superintendent of Telegraph and Paymaster; George E. Freeman, Road-Master.

Railroad Claim Agents' Association.—At the annual convention in Philadelphia, Sept. 10, the following officers were chosen: President, George Olds; Vice-President, C. H. Riggs; Secretary, H. Walker; Treasurer, E. Darrach.

Railroad Passenger & Traveling Agents' Association.—At the Annual Convention in Philadelphia, Sept. 10, the following officers were chosen: President, George D. Feller, St. Louis, Kansas City & Northern; Secretary, W. P. Cooley, Chicago, Rock Island & Pacific.

Southeastern, of Canada.—Mr. M. McFarland has been appointed Master Bridge Builder, in place of R. A. Cook, resigned.

PERSONAL.

—Mr. Jay Gould has sent \$5,000 to the Howard Association of Memphis, and authorized its officers to draw upon him for their daily expenses until he notifies them to stop.

—Mr. James McHenry denies that he is bankrupt and says that he has only put his property into the hands of trustees pending his appeal from the judgment against him lately obtained by the Erie.

—Mr. James H. Weeks, formerly for several years President of the Long Island Railroad Company, died Sept. 7, at his residence in Yaphank, N. Y., in the 82d year of his age.

—It is reported that Mr. James R. Shober, now Superintendent of the Columbus Division of the Pittsburgh, Cincinnati & St. Louis road, is to succeed Col. Horace Scott as General Superintendent of the Jeffersonville, Madison & Indianapolis road.

—It is reported that Mr. Arthur A. Hobart will resign his position as Superintendent of the Boston & Troy road, which he has held only a few months.

—It is reported that the company, to be formed by the consolidation or other combination of the Wabash with the St. Louis, Kansas City & Northern, will have as President Mr. Cyrus W. Field, now President of the Wabash; as First Vice-President Mr. B. W. Lewis, Jr., now President of the St. Louis, Kansas City & Northern; as Second Vice-President, Mr. A. L. Hopkins, now General Manager of the Wabash, while for General Manager it goes outside of the two companies and takes Mr. John C. Gault, for several years Assistant General Manager of the Chicago, Milwaukee & St. Paul, who was for several years also Assistant Superintendent and General Superintendent of the Chicago & Northwestern when Mr. George L. Dunlap was Superintendent and General Manager. Mr. Gault is probably as thoroughly acquainted with the traffic of the vast district which these two roads occupy as any man living, and to the thoroughness of his knowledge he unites a very unusual degree of energy.

—The Wisconsin Democrats have nominated Hon. Alexander Mitchell, President of the Chicago, Milwaukee & St. Paul Company, as their candidate for Governor of the state.

—Col. Thomas A. Scott, President of the Pennsylvania Railroad Company, arrived in Philadelphia, Sept. 10, in the steamship Ohio, on his return from his long tour in Europe and the East.

TRAFFIC AND EARNINGS.

Chicago Lake Traffic.

The arrivals and clearances of lake craft at Chicago in the month of August, and the aggregate tonnage of the vessels have been as follows for two years:

	No. of Vessels.		Tonnage.	
	1879.	1878.	1879.	1878.
Arrivals	1,688	1,389	581,200	488,235
Clearances	1,727	1,364	587,464	496,019

This shows an increase of 19 per cent. in the tonnage of arrivals and of 17 1/2 per cent. in the tonnage of clearances.

Billing Freight from Chicago.

At the last weekly meeting of the general freight agents of the railroads leading east from Chicago, the following resolution was adopted and submitted to and approved by the general managers:

"On and after Sept. 15, 1879, all property delivered to our respective roads and the fast-freight lines running over our roads, whether it be delivered at our depots by trucks, or in cars by connecting roads, or in the form of an order upon an elevator or packing-house, will be received by us only upon the following conditions, and the same shall be printed or stamped upon our depot receipts and bills of lading, viz.: 'It being expressly understood and agreed, that the Company reserves the right, in consideration of issuing a through bill of lading and guaranteeing a through rate, to forward said goods by any railroad line between point of shipment and destination.'"

Delaware Fruit Traffic.

Peach shipments over the Delaware Railroad up to Sept.

6 were 4,018 car-loads. Last week they were down to 80 car-loads a day and this week are much smaller, as the best of the season is over.

Railroad Earnings.

Earnings for various periods are reported as follows:

Eight months ending Aug. 31:

	1879.	1878.	Inc. or Dec.	P. c.
Atchison, Topeka & Santa Fe.....	\$3,719,518	\$2,305,358	I. \$1,414,160	61.3
Bur. Cedar Rapids & No.	884,641	962,981	D. 78,340	10.9
Central Pacific.....	10,849,408	11,064,474	D. 215,066	2.2
Chicago & Alton.....	3,302,963	3,000,747	I. 302,216	10.1
Chi. Mil. & St. Paul.....	5,537,000	5,425,949	I. 111,051	2.0
Chi. & Northwest'n.....	9,613,529	9,487,936	I. 125,593	1.4
Chicago St. Paul & Minn.....	630,442	534,177	I. 96,265	18.0
Grand Trunk.....	5,579,632	5,707,504	D. 127,872	2.2
Great Western.....	2,747,913	2,966,315	D. 218,402	8.3
Hannibal & St. Joe.....	1,077,286	1,179,966	D. 102,710	8.7
Ill. Central, Ill. lines.....	3,436,682	3,602,145	D. 165,463	4.6
Ill. Central, Iowa lines.....	883,648	1,093,000	D. 209,352	23.7
Mo. Kansas & Texas.....	1,807,800	1,770,520	I. 37,280	2.1
St. L., Alt. & T. H.....	326,345	303,371	I. 22,974	7.5
St. Louis, Iron Mt. & So.....	2,670,392	2,516,913	I. 153,449	6.1
St. Louis & South-eastern.....	438,733	404,912	I. 33,821	8.4
St. Louis & San Francisco.....	815,790	743,709	I. 72,080	9.7
Toledo, Peoria & Wabash.....	780,392	836,161	D. 55,769	6.7
Wabash.....	2,899,462	3,148,545	D. 249,083	7.9

Seven months ending July 31:

Dakota Southern.....	\$118,328	\$124,301	D. \$5,973	4.8
St. Paul & Sioux City.....	340,775	332,833	I. 7,942	2.3
Sioux City & St. Paul.....	188,063	207,232	D. 19,169	9.3

Six months ending June 30:

N. Y., Lake Erie & Western.....	\$7,665,092	\$7,131,668	I. \$533,424	7.5
Net earnings.....	1,854,742	1,957,741	D. 102,999	5.3

Month of June:

N. Y., Lake Erie & Western.....	\$1,230,419	\$1,258,990	D. \$28,571	2.3
Net earnings.....	290,524	486,310	D. 195,786	40.3

Month of July:

Dakota Southern.....	\$14,529	\$10,194	D. \$4,335	24.3
Galveston, Harrisburg & S. Antonio.....	98,580	83,877	I. 14,703	17.5
New York & New England.....	188,532
Net earnings.....	71,043

Ogdensburg & Lake Champlain.....	49,176	43,858	I. 5,318	11.9
Net earnings.....	17,000	5,986	I. 11,014	194.1
St. Paul & Sioux City.....	47,622	47,720	D. 98	0.2
Sioux City & St. Paul.....	28,325	27,519	I. 806	2.9

Month of August:

Atchison, Topeka & Santa Fe.....	\$510,500	\$466,161	I. \$44,339	9.5
Bur. Cedar Rapids & Mo.....	122,827	104,443	I. 18,384	17.6
Central Pacific.....	1,552,000	1,726,067	D. 174,067	10.1
Chicago & Alton.....	573,863	563,379	I. 10,484	1.9
Chi. Mil. & St. Paul.....	729,000	522,486	I. 206,514	39.5

Chicago & Northwestern.....	1,347,000	1,266,460	I. 80,540	6.4
Chi. St. Paul & Minn.....	40,143	39,957	I. 186	22.9
Hannibal & St. Joe.....	129,660	214,232	D. 84,562	39.5
Ill. Central, Illinois lines.....	474,061	572,827	D. 98,766	17.1
Ill. Central, Iowa lines.....	104,677	103,062	I. 1,615	1.6
Mo. Kansas & Tex.....	306,329	294,835	I. 11,494	3.9

St. L., Alton & Terre Haute, Belleville Line.....	43,650	44,230	D. 580	1.3
St. L., Iron Mt. & So.....	400,100	348,534	I. 60,566	17.4
St. Louis & San Francisco.....	181,400	121,500	I. 59,900	49.3
St. Louis & South-eastern.....	75,924	66,377	I. 9,547	14.4
Toledo, Peoria & Wabash.....	102,282	131,145	D. 28,863	22.0
Wabash.....	522,720	570,120	D. 47,400	9.7

Week ending Aug. 29:

Great Western.....	\$80,378	\$80,080	I. \$298	0.3
Week ending Aug. 30:				
Grand Trunk.....	\$180,772	\$171,008	I. \$9,764	5.7

Provision Movement.

The shipments of hog products from Chicago for the ten months from Nov. 1, 1878, to Aug. 28, for four years have been:

1878-79.....	502,156	1877-78.....	427,229	Increase.....	74,927	P. c.....	17.5
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For the same period the aggregate exports of the United States have been:

1878-79.....	514,651	1877-78.....	433,506	Increase.....	81,145	P. c.....	18.7
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The Chicago shipments have thus been very nearly equal to the total exports.

The "summer packing" in the Northwest from March 1 to Aug. 27 amounted to 2,539,886 hogs this year, against 2,412,703 last; 54 per cent. of this number was packed at Chicago, against 59 per cent. last year.

Petroleum Exports.

For the eight months ending Aug. 30, the exports of petroleum have been 244,021,977 gallons this year, against 194,000,219 in 1878 and 230,311,850 in 1876. Of the exports this year, 72.4 per cent. was from New York, 18.5 from Philadelphia, 6.7 from Baltimore, 1.9 from Boston and 0.5 per cent. more than last year, Philadelphia 40 1/2 per cent. more, Baltimore 27 per cent. less, Boston 142 per cent. more. Baltimore's exports are the smallest for four years, though the aggregate is 26 per cent. greater than last year and 6 per cent. greater than ever before.

Grain Movement.

For the week ending Aug. 30 receipts and shipments of grain of all kinds at the eight reporting Northwestern markets, and receipts at the seven Atlantic ports have been, in bushels:

North-western.		Northwestern shipments.		Atlantic receipts.	
Year.	Receipts.	Total.	By rail.	P. c. by rail.	Receipts.
1879.....	3,642,094	776,740	21.3	2,735,156
1878.....	3,215,118	826,205	1,233,049	32.2	2,455,103
1877.....	4,596,574	4,631,793	1,530,811	30.5	4,145,143
1876.....	4,832,385	3,271,549	1,573,058	48.2	3,371,296
1875.....	4,985,532	4,710,569	1,466,301	24.3	4,846,140
1874.....	8,790,893	6,719,785	1,275,462	18.7	2,189,228
1873.....	7,428,249	5,761,801	1,059,363	34.0	7,588,299

The receipts of the Northwestern markets for the week this year were 15 per cent. larger than for the previous week, and much larger than in any previous week of this

year. Previous to last year they were never equalled in any single week, but in 1878 they were considerably exceeded in the last three weeks of August and the first of September. Of these receipts this year, 48.6 per cent. was at Chicago, 15.3 at Toledo, 13.5 at St. Louis, 6.6 at Detroit, 5.4 at Peoria, 5.2 at Milwaukee, 3.2 at Cleveland, and 2.2 at Duluth.

The shipments of these markets were smaller than in either of the two preceding weeks and than in the corresponding week of last year. The rail shipments, however, were exceptionally large—the largest since June, and this, although this week was the first after the advance of the grain rate from 25 to 30 cents per 100 lbs. Atlantic receipts are a little larger than in the previous week, but smaller than in either of the three weeks preceding that. There was, however, but one week last year when they were exceeded, and none in any previous year.

Of these Atlantic receipts, 46.7 per cent. arrived at New York, 18.1 at Baltimore, 14.9 at Philadelphia, 8.8 at Montreal, 5.5 at Boston, 4.1 at New Orleans, and 0.7 per cent. at Portland. New York's receipts have been exceeded twice this year. Philadelphia's seven times, Baltimore's four times. Montreal's receipts are the largest of the year.

The month of August beginning a new crop year, there will be interest in following the movement for that month, which has been as follows (five weeks ending Aug. 30) for six years:

North-western.		Northwestern Shipments.		Atlantic receipts.	
Year.	Receipts.	Total.	By rail.	P. c. by rail.	Receipts.
1879.....	20,910,598	16,897,035	4,232,449	25.0	15,397,984
1878.....	18,214,014	16,048,992	4,433,668	27.6	16,488,763
1877.....	19,663,036	17,292,351	7,292,113	42.1	16,469,100
1876.....	24,304,611	21,043,147	4,407,704	21.0	19,928,224
1875.....	37,658,879	26,974,655	6,859,015	25.4	32,533,699
1874.....	33,230,315	28,723,882	9,023,634	31.4	38,932,471

The August movement to Northwestern markets was much heavier in 1873 than in 1874, but we have not the figures for the first week of the five included above, but for the four other weeks the receipts of Northwestern markets in that year were 21,420,797 bushels, or more than in the five weeks of the three succeeding years. It was not till 1877 that these heavy receipts were equaled, but in the two years past the movement has been very much greater, though about 12 per cent. less this year than last. The almost uninterrupted increase in the shipments of Northwestern markets and the receipts of Atlantic ports is due to the larger business done by the railroads. This year their August business is nearly a fourth larger than in 1876 even; yet in 1876 there was a desperate railroad war, which reduced rates to figures previously unheard of, while this year the whole business has been done at agreed rates, and mostly at prices one-fourth to one-half greater than those prevailing in 1876.

It will be noted that while the Northwestern shipments were but 1,850,000 greater this year than last, the Atlantic receipts were 6,400,000 bushels greater—evidence that a larger and larger proportion of the grain is shipped through to the seaboard from interior Western stations, without stopping at any of the eight reporting markets—St. Louis, Peoria, Chicago, Milwaukee, Duluth, Detroit, Toledo and Cleveland. These places, by the way, are no longer the eight leading primary markets; for Kansas City and Cincinnati exceed both Duluth and Cleveland in their receipts.

For the week ending Sept. 9 (Tuesday), receipts and shipments at Chicago and Milwaukee were:

	Receipts.	Shipments.
Chicago.....	3,967,404	3,215,788
Milwaukee.....	622,300	301,110
Total.....	4,589,704	3,516,899

For the week ending Sept. 9, the preceding week and the corresponding week last year the receipts at the four leading Atlantic ports were:

	Week ending—		
	Sept. 9, '79.	Sept. 2, '79.	Sept. 10, '78.
New York.....	3,572,956	3,592,514	4,232,713
Baltimore.....	1,428,914	1,358,239	1,180,156
Philadelphia.....	836,375	903,850	759,100
Boston.....	444,943	279,609	496,355
The four cities.....	6,383,188	6,134,302	6,665,324

This showed an increase over the previous one, but a decrease from last year. New York receipts were 57.5 per cent. of the total, against 58.6 per cent. the previous week, and 63.5 per cent. last year. Of the total New York receipts 1,570,386 bushels were by rail.

For the 12 months ending with August the exports of flour and grain from New York, Boston, Montreal, Philadelphia and Baltimore have been as follows for the past two years:

	1878-79.	1877-78.	Inc. or Dec.	P. c.
Flour.....	5,411,663	3,790,121	I. 1,621,542	42.5
Wheat.....	114,416,409	76,336,449	I. 38,079,960	49.9
Corn.....	76,886,154	78,870,821	D. 1,984,667	2.5

During the same time the wheat receipts of all the Atlantic ports were nearly 39,000,000 bushels greater this year than last, so that it would appear that substantially the whole increase has been exported.

Chicago Lumber Traffic.

Receipts and shipments of lumber at Chicago for the eight months from Jan. 1 to Sept. 2 have been as follows, in feet:

	1879.	1878.	Increase.	Per c.
Receipts.....	879,051,167	680,781,682	198,269,485	28.0
Shipments.....	451,993,976	374,574,230	77,419,746	20.7

The traffic is very much heavier now than it was earlier in the year, and the increase over last year is likely to grow greater in proportion as the season advances.

Suez

Coal Movement.

Coal tonnages are reported as follows (anthracite by the *Engineering and Mining Journal*) for the eight months ending Aug. 30, the tonnage in each case being only that originating upon the line to which it is credited:

Anthracite:	1879.	1878.	Inc. or Dec.	P. c.
Philadelphia & Reading.....	4,797,655	3,122,090	I. 1,675,565	53.7
North'n Cen. Shamokin Div. and Summit Branch R. R. & Sunbury, Hazleton & Wilkesbarre.....	562,792	396,098	I. 196,694	53.7
Pennsylvania Canal.....	17,600	18,311	D. 711	3.9
Central of N. J., Lehigh Div.....	271,134	210,285	I. 60,849	28.9
Lehigh Valley.....	2,566,370	1,453,185	I. 1,113,185	76.6
Penna. & New York.....	2,717,370	2,086,998	I. 630,372	30.2
Delaware, Lacka. & Western.....	21,707	20,032	I. 1,675	8.4
Del. & Hudson Canal.....	2,394,342	1,326,642	I. 1,067,710	80.5
Co.....	2,158,090	1,333,490	I. 825,251	61.9
Penna. Coal Co.....	922,189	538,636	I. 383,553	71.2
State Line & Sullivan.....	31,760	20,620	I. 11,140	54.1
Total anthracite.....	10,461,609	10,496,326	I. 5,965,283	56.8
Semi-bituminous:				
Cumberland, all lines	1,098,325	993,868	I. 104,457	10.5
Huntingdon & Broad Top.....	90,274	94,363	D. 4,089	4.3
East Broad Top.....	41,923	39,214	I. 2,709	6.9
Tyrone & Clearfield.....	1,001,827	855,536	I. 146,291	17.1
Belleville & Snow Shoe.....	43,364	15,646	I. 27,718	177.5
Total semi-bitum's.....	2,275,713	1,908,627	I. 277,086	13.9
Bituminous:				
Barclay R. R.....	216,628	201,107	I. 15,521	7.7
Allegheny Region, Pa. R. R.....	122,776	133,912	D. 11,136	8.3
Penn. and Westmoreland.....	498,639	436,100	I. 62,539	14.3
West Penn. R. R.....	132,562	121,288	I. 11,274	9.3
Southwest Penn. R. R.....	25,306	17,199	I. 8,107	47.1
Pittsburgh Region, Pa. R. R.....	315,183	290,149	I. 25,034	21.2
Total bituminous.....	1,311,094	1,169,755	I. 141,339	12.1
Coke:				
Allegheny Region, Pa. R. R.....	32,008		I. 32,008	
Penn. and Westmoreland.....	50,494	49,113	I. 10,381	21.1
West Penn. R. R.....	62,138	55,281	I. 6,857	14.4
Southwest Penn. R. R.....	621,411	508,850	I. 114,561	22.6
Pittsburgh Region, Pa. R. R.....	110,585	65,008	I. 45,577	70.1
Total coke.....	886,296	676,252	I. 210,044	31.1

Bituminous and semi-bituminous trade shows a large increase in spite of low prices and excessive production of anthracite.

Anthracite production for the eight months for six years past has been as follows:

	1879.	1878.	Inc. or Dec.	P. c.
1879.....	16,461,609	1876.....	9,929,704	
1878.....	10,496,326	1875.....	10,924,694	
1877.....	12,497,547	1874.....	12,232,005	

There appears to be little probability of a combination in the anthracite trade this year, though there has lately been a good deal of talk over it.

The anthracite coal tonnage of the Belvidere Division, Pennsylvania Railroad, for the eight months ending Aug. 30 was as follows:

	1879.	1878.	Inc. or Dec.	P. c.
Coal Port for shipment.....	297,732	319,048	D. 21,316	6.9
Local distrib'n on N. J. lines.....	203,794	111,094	I. 92,700	82.6
Company's use on N. J. lines.....	58,343	51,845	I. 6,498	12.5
Total.....	559,869	482,087	I. 77,782	16.3

Of the total this year, 449,548 tons were from the Lehigh, and 110,321 tons from the Wyoming Region.

Actual tonnage passing over the Huntingdon & Broad Top road for the eight months was as follows:

	1879.	1878.	Inc. or Dec.	P. c.
Broad Top coal.....	90,274	94,363	D. 4,089	4.3
Cumberland.....	136,305	83,967	I. 52,338	50.4
Total.....	216,579	178,330	I. 38,249	21.5

A strike among the miners in the Cumberland Region may make considerable trouble. It is not general, the men at some of the mines remaining at work at the old wages, 40 cents a ton.

The distribution of Cumberland coal tonnage was as follows, local consumption accounting for difference from totals above:

	1879.	1878.	Inc. or Dec.	P. c.
By Baltimore & Ohio R. R.....	630,401	556,777	I. 73,624	13.2
By Chesapeake & Ohio Canal.....	352,307	358,490	D. 6,183	1.7
By Bedford Div., Pa. R. R.....	113,743	70,726	I. 43,017	48.2
Total.....	1,096,451	991,993	I. 104,458	10.5

Actual tonnage of anthracite passing over the Pennsylvania & New York road for the nine months of its fiscal year from Dec. 1 to Aug. 30 was: 1879, 626,107; 1878, 558,625; increase, 67,482 tons, or 12.1 per cent.

Receipts of coal at Chicago for the seven months ending July 31 were: Bituminous, by rail, 704,869; bituminous, by water, 152,548; anthracite, by rail, 191,459; anthracite, by water, 185,954; total bituminous, 857,417; total anthracite, 377,413; total by rail, 896,328; total by water, 338,502; total of all, 1,234,830; total same period in 1878, 902,173; increase, 332,657 tons, or 36.9 per cent.

OLD AND NEW ROADS.

Atchison, Topeka & Santa Fe.—The Boston *Advertiser* says of this company's leased Pueblo & Arkansas Valley line: "Rental and rebate for six months ending July 1, 1879, \$263,514.47; corresponding period 1878, \$70,916.26; increase, \$192,598.21, or nearly 300 per cent. The earnings so far this year are at the rate of 7 per cent. on the entire stock and bonds of the road, and when it is considered that \$1,070,500 of the former and \$1,067,000 of the latter were issued to build the extension to Leadville, etc., and which has up to this time earned nothing, these figures afford an unparalleled instance of the wonderful development of the railway interest in the Southwest."

A dispatch from Pueblo, Col., Sept. 10, says: "Chief Engineer Robinson, of the Atchison, Topeka & Santa Fe Railway, stationed at this point, has received orders to commence at once the location of a line for the extension of that road from this city to Denver. In accordance with the above order a strong party under the command of H. K. Holbrook will begin the work to-morrow morning. The proposed line will run up the Fontaine qui Bouille River, nearly parallel with the Denver & Rio Grande Railway, passing through Colorado Springs and other important points. The work is to be done as rapidly as possible, and the line will be ready for the graders at an early day."

Atchison, Topeka & Santa Fe and the Denver & Rio Grande.—The Commission of three engineers appointed by the United States Circuit Court to report upon

the disputed line through the Grand Cañon of the Arkansas, two of whom were nominated by the Denver & Rio Grande and the Atchison, Topeka & Santa Fe respectively, and the third by the Court at its own selection, have been engaged upon their investigation since Aug. 18. An application has been made before Judge Hallett by the Atchison Company, at the suggestion of Gen. William Sooy Smith, the nominee of that company, asking a change in the previous order so as to enable a survey to be made from the 20th mile-post in the cañon to Leadville prior to the rendering of their report by the Commission, but the motion was opposed by the Rio Grande Company on the ground that the delay is unnecessary and an injustice to it. Judge Hallett declined to change the former order, and the Commissioners now expect to close their report next week. The points to be reported upon are, first, whether there is room enough for the Atchison Company to build a new line on the opposite or south side of the river, and whether it is necessary for them to come upon the line or right of way of the Rio Grande Company on the north side; second, what would it now cost to build a line such as has been constructed by the Atchison Company on the right of way of the Rio Grande Company.

Baltimore & Hanover.—Track is now laid to a point two miles southeast from the late terminus at Hampstead, Carroll County, Md., and 14 miles from the junction with the Bachman Valley road. Six miles of track are still to be laid to complete the line to the Western Maryland at Emery Grove, and it is expected that trains will run through by November next.

Bellaire & Southwestern.—This company has sold bonds enough to complete its road to Woodfield, O., and has already contracted for the iron.

Buchanan & Clifton Forge.—It is stated that a contract has been let to Mason, Shanahan & Hoge to complete the grading of this road from Buchanan, Va., the terminus of the James River & Kanawha Canal, to the Chesapeake & Ohio at Clifton Forge.

Central Branch, Union Pacific.—On the Southern Branch line which is to follow the South Fork of the Solomon River, the track has been laid to Osborn, Kan., 10 miles west by south from the junction with the Northern Branch, and 218 miles from Atchison. Trains have begun to run to Osborn.

Central Iowa.—The town of Ottumwa, Ia., has voted a tax to aid this company in building a branch from near Eddyville to Ottumwa, a distance of 16 miles. The new line will be parallel and close to the Keokuk & Des Moines road.

Central, of New Jersey.—The Long Branch Division has done so large a business this season that it is probable that a second track will be laid before next summer. The work would not be very expensive, as nearly all the bridges have been built for double track, and some of the heavier cuttings are already wide enough.

Chatterawh.—A considerable force is now at work on the grading of this road between Ashland, Ky., and Peach Orchard, and it is to be ready for the iron by December. Ashland is on the Ohio River, and the line runs thence up the Big Sandy River and its West Fork about 35 miles to Peach Orchard in Lawrence County, through a coal and iron district.

Chicago & Alton.—This road will hereafter be divided into four operating divisions, instead of two as heretofore. The Chicago Division will include the main line from Chicago to Bloomington, the branch from Dwight to Lacon and Washington and the Coal City Branch. The St. Louis Division will include the main line from Bloomington to St. Louis and the 40 miles of the former Jacksonville Division from Godfrey to Roodhouse. The Jacksonville Division will include the line from Bloomington by Jacksonville to Mexico, Mo., and the Kansas City Division the line from Mexico to Kansas City and the branch from Mexico to Jefferson City.

Chicago & Lake Huron.—The *Detroit Post and Tribune* of Sept. 6, says: "There are still a considerable number of unpaid receiver's certificates of the Eastern Division of the Chicago & Lake Huron Railroad. Master Commissioner Mandell has money in his hands to pay them, but they are not presented. The inference is that they are held by the Grand Trunk people, who will retain them until the whole matter has been closed. The Court has ordered a deed of the property to be given to the purchasing committee. Matters upon the Western Division are still in an unsettled state. There is considerable right of way of that division yet unpaid for, and evidently much money will have to be spent to put the line from Port Huron to Valparaiso in first-class condition. A contract has been entered into between Mr. Vanderbilt and Grand Trunk parties by which the former agrees to convey to the latter, under certain contingencies, the link between Flint and Lansing, over which there has been so much controversy. The consideration to be paid is not made public, but it is understood that the payment is to be made entirely in bonds. There are yet some 80 miles of road in Indiana, between the Michigan state line and Valparaiso, with regard to which foreclosure proceedings are now pending at Indianapolis. This portion of the road will probably be sold before November, and will, of course, be bought in the same interest which now has the other portions. A contract has been made for building a link from Valparaiso to the Illinois state line, the work to be completed by the 1st of November. If things go on smoothly, as there now seems every reason to expect they will, the Grand Trunk will have its Chicago connection in actual operation within 60 days."

Chicago & Northwestern.—This company has executed a new mortgage to the Farmers' Loan and Trust Company, Trustee, to secure an issue of \$15,000,000 new 6-per cent. bonds having 50 years to run, to be used for the purpose of building or buying new lines, extensions and branches, the issue not to exceed \$15,000 per mile of road built or bought. The first issues to be made will be \$2,400,000 for the line now under construction from Tracy, Minn., westward into Dakota, under the organizations known as the Chicago & Dakota, and the Dakota Central, and for the extension of the Iowa Midland line westward. The payment of these bonds is to be secured by deposit with the Trustee of an equal amount of first-mortgage bonds secured upon the new lines, or by direct deeds of trust, executed to the Trustee, of the several lines as they may be completed or acquired. The first lot of these bonds, \$1,050,000 in amount, issued upon 70 miles of road from Tracy westward, now nearly completed, has been sold to Kuhn, Loeb & Co., of New York, and will be dated Oct. 1. The price at which they were sold is not stated. They will be known as the sinking-fund bonds of 1879.

The grading of this Chicago & Dakota line is now completed from Tracy, Minn., to the Big Sioux River in Dakota, 70 miles, and track has been laid from Tracy out 40 miles. The contractors are at work grading 70 miles more, from the Big Sioux to the James River.

Surveys are in progress for an extension of the Winona & St. Peter line from Watertown, Dak., on Lake Kampeska, northwest to Bismarck, on the Northern Pacific. Work will not be begun this season.

The company has just completed a branch from its Maple

River line at Wall Lake, Ia., northward to Sac City, the county-seat of Sac County. It is 12 miles long, and is opened for business.

Chicago, St. Paul & Minneapolis.—It is reported that negotiations are in progress for a lease of this road (the old West Wisconsin) to the Chicago and Northwestern. It has always been worked chiefly in the Northwestern interest, and it has been understood to be controlled by that company.

Concord.—In the Pearson suit against this company, which has not been heard of for some time, the work of taking evidence has begun before a special master. It is expected to occupy several months.

Cumberland & Ohio, Southern Division.—On this road, which the Louisville & Nashville Company is building as lessee, track is now laid to Campbellsville, Ky., 18 miles from the junction with the lessee's road at Lebanon, and eight miles beyond the last point reported.

Dakota Southern.—An agreement has been concluded for the consolidation of this company with the Sioux City & Pembina, which it now leases and works. The consolidated road will be known as the Sioux City & Dakota, and will own a line from Sioux City, Ia., to Yankton, Dak., 61 miles, and a line from Davis Junction to Beloit, 52 miles, with an extension in progress from Beloit to Sioux Falls.

Delaware Western.—It is reported that a large interest in this road has been bought by parties who intend to build coal wharves at Wilmington, Del., and to use the road to bring coal to that point. Its only connection is with the Pennsylvania Railroad.

Denver & Missouri River.—This company has been organized to build a road from Denver, Col., eastward about 200 miles to the Kansas line, to connect there with the extension of the Central Branch Union Pacific road. The capital stock is to be \$2,000,000. The office is at Denver.

Fond Du Lac, Amboy & Peoria.—This road, which connects with the Chicago, Milwaukee & St. Paul at Iron Ridge, Wis., has completed arrangements for transferring the freight cars of that road to its own narrow-gauge trucks at the junction, so that freight can be transferred without breaking bulk.

Grand Trunk and the Great Western.—The negotiations between these companies still continue, and London dispatches seem to show that there is a better prospect of agreement, the Great Western directors gradually coming round to the Grand Trunk plan for a general pooling of their business.

Helena & Iron Mountain.—Work has lately been resumed on this road, and track is now reported laid on it from the Arkansas Midland at Bushville, eight miles from Helena, Ark., northwest to Sale's Place, six miles. Work is to continue at least until the track reaches Mariana, 12 miles further. The grade is completed for some 45 miles.

Illinois Central.—The traffic on the lines operated by this company in August was as follows:

	1879.	1878.	Inc. or Dec.	P. c.
In Illinois.....	\$474,661.00	\$572,821.75	D. \$98,160.75	17.1
In Iowa (leased lines).....	104,677.00	103,002.12	I. 1,674.88	1.6
Total.....	\$579,338.00	\$675,823.87	D. \$96,485.87	14.3

During August, 1879, the land sales were 2,113.49 acres for \$13,243.60, and the cash collected on land contracts was \$12,535.33.

Indianapolis, Cincinnati & La Fayette.—This company is said to be negotiating for a tract of 23 acres of land in Indianapolis, upon which it purposes building new shops, additional room being much needed for repairs of equipment.

Kansas Southern.—This company has been organized to build a road from Lindsborg, Kan., westward through Sterling to some point in Clark County, about 175 miles. It will run between the Atchison, Topeka & Santa Fe and the Kansas Pacific, and will be built in the interest of the last-named company.

Louisiana Western.—The grading from the Sabine River to the Calcasieu is now all completed, except six miles of heavy work, and some of the piling in the Calcasieu bottom. Track has been laid from Lake Charles, La., eastward to English Bayou, seven miles, and work is progressing steadily. Some delay and some loss of material has been caused by the destruction of some barges owned by the company in a recent storm.

Macon & Brunswick.—The bill authorizing the lease of this road has passed the Georgia Legislature and been signed by the Governor, and bids for a lease will soon be called for. The lease will be for a term of years, and the lessees will have the privilege of buying the road for \$1,125,000. They will be required to spend \$200,000 in improving the road within two years, and also to extend it from Macon to Atlanta, the extension to be begun within one year and completed in five years. They will have authority to build branches from Hawkinsville or Eastman to Americus, and from Brunswick to the Florida line, and will be required to give proper security.

Should no one offer to lease the road, the Governor is to appoint five commissioners to manage and operate the road for the benefit of the state.

The fall schedule of this road shows two daily passenger trains, both making close connections for Florida points. The night train, leaving Macon at 7.45 p. m., runs through to Brunswick, connecting there with steamboat for Fernandina (the "Cumberland Route"), whence trains run over the Atlantic, Gulf & West India Transit road to Cedar Keys, and by Baldwin and the Florida Central to Jacksonville. Through trains are run from Fernandina to Jacksonville. The morning train, leaving Macon at 7.15 a. m., runs to Jesup, making there close connection by the Atlantic & Gulf all-rail line to Jacksonville. The time from Macon to Jacksonville by the Cumberland Route is 19 hours; by Jesup and the all-rail route, 24 hours.

Manchester & Keene.—The interest owned by Mr. Theodore H. Wood, of Nashua, has been transferred to the Nashua & Lowell Company. That company will soon begin to operate the road from Greenfield, N. H., to Keene, under contract.

The property of the company was recently attached under a suit begun by some of its creditors. The case, however, will probably be settled.

Manitoba Southwestern Colonization.—Local municipalities have voted to issue \$200,000 debentures to build for this company a bridge over Red River at Winnipeg, Manitoba, to be used both for railroad and highway traffic.

Marquette & Mackinac.—At a meeting of the Board of Control of State Lands in Detroit, Sept. 4, a contract was executed with the Detroit, Mackinac & Marquette Company for the construction of this road, pursuant to the

action of the Board at its previous meeting, as noted last week. Under this contract the company is to complete the first section of 20 miles from Marquette southeast by July 31, 1880, and the rest of the line by Dec. 31, 1881.

Missouri, Kansas & Texas.—It is said that the Dutch bondholders have not generally approved the latest plan of reorganization, and that it is doubtful whether enough bonds will agree to it to make it successful. One objection urged is that it does not provide for sufficient security to bondholders, and some objections are also urged against the proposed Texas extensions, which are a part of the plan.

Missouri & Western.—A bill in equity has been filed in the United States Circuit Court in New York against this company, J. & W. Seligman and others. The plaintiffs are holders of stock and other claims against the old Memphis, Carthage & Northwestern Company, and they allege that the road was sold under a certain deed of trust and transferred to the present company in order to evade their claims and to keep it in the hands of certain parties. They ask that a receiver be appointed and the property held for their claims. The road has lately been transferred to the St. Louis & San Francisco.

Mobile & Ohio.—The Committee of Reorganization gives notice that the transfer books of provisional certificates will close Sept. 15, preparatory to the issue of the new securities. Due notice will be given when the bonds, etc., are ready. The certificates for assessed shares of the capital stock are now ready for delivery.

Notice is also given that the company has established a transfer office at No. 11 Pine street, New York, where all transfers may be made of assessed stock, and of the new bonds and debentures when issued. The Farmers' Loan and Trust Company is registrar, and will countersign all certificates.

Morgan's Louisiana & Texas.—A very violent storm Sept. 1 did much damage to this road about Morgan City and Berwick, La. The round-house at Berwick, a new building, just completed to accommodate engines on the new extension, and many other buildings have the roofs off, chimneys down, etc. The gale was so furious that it carried plates from the iron warehouse on Morgan wharf clear across the bay into Berwick.

Nashville & Tusculosa.—Track on this road is now laid to a point 10 miles southward from Bon Aqua Springs, Tenn., and 20 miles from the junction with the Nashville, Chattanooga & St. Louis, at Dickson.

New York, Lake Erie & Western.—The new passenger station at Buffalo is finished and was opened for business Sept. 2. It was designed by Mr. J. C. Neilson, of Baltimore, architect, and is thus described by the Buffalo Commercial Advertiser:

"The building is three stories in height, including the elegant slate roof, and is of brick, with Ohio (Berea) stone trimmings. It fronts on Michigan street, and the outside dimensions are 109 by 46 feet. Behind the new brick building, stretching away toward Chicago street, a distance of 400 feet, is a frame structure, under which the passengers disembark from the cars. The first story of the depot building is arranged as follows: Baggage rooms, 58 by 18 feet; the general waiting room, 45 by 30 feet; the ladies' waiting room, 20 by 20 feet; ticket office 21 by 15 feet, and restaurant 18 by 45 feet. The whole interior looks very cheerful, airy, and comfortable, and has been elegantly finished off in light colors. A broad staircase to the left of the main entrance leads to the second story, where we find the business offices, including those of the Division Superintendent, Mr. Taylor, the Train Dispatcher, Mr. J. A. McDuffie, the Resident Engineer, Mr. W. A. Haven, the Master of Transportation, Mr. Caligan, etc.; also offices for general telegraphic purposes of the road, and for the division clerks. On the third story are rooms for the conductors and brakemen, a number of sleeping apartments, and a beautifully arranged library and reading room, in which the Erie Temperance Association will hereafter hold its meetings. This room is especially well adapted to the purposes for which it will be used."

New York Rapid Transit Lines.—The work of laying out the extension of the elevated railroads into and through New York known as the "annexed district," north of the Harlem River, is to be done all over again. A new commission has been appointed by the Mayor of the city, consisting of Messrs. John J. Crane, Charles L. Perkins, Gustav Schwab, Richard M. Hoe and Wm. L. Olliffe.

Nevada Central.—The contractors for this road are Gen. James H. Ledlie, R. M. Steel and associates, of New York, who are to build and equip the entire line from the Central Pacific at Battle Mountain, Nev., southward to Austin, 90 miles, and to complete it this year. Grading is now progressing rapidly. The line will give railroad communication to several important mining districts.

Northwestern Grand Trunk.—Under this name the Chicago & State Line Company, of Illinois, and the State Line Extension, of Indiana, have been consolidated. The line to be built by the company will form part of the Grand Trunk's line to Chicago, and will extend from that city to Valparaiso, Ind., about 45 miles.

Ohio & Mississippi.—The important suit just decided by the United States Circuit Court was brought by Mr. Dimpfel, a stockholder, who claimed that the bonds known as the Springfield Division bonds were not a legal or valid obligation of the company. It will be remembered that the Springfield Division was built by the Springfield & Illinois Southern Company, was sold under foreclosure and bought by the bondholders, who in 1875 sold it to this company for \$1,700,000 in bonds. The total issue authorized was \$3,000,000, the balance over the purchase bonds to be used for rebuilding and improving the line. By the last published statement \$1,972,000 out of the \$3,000,000 had been issued.

In the decision of the Circuit Court in this Dimpfel suit, Judge Drummond says that at the time of the purchase of the road by this company, it was "considered a valuable auxiliary, and this, it is to be presumed, was the cause of the purchase made by the Ohio & Mississippi Company." The judge says further: "There can be no doubt, I think, that it was competent for the Ohio & Mississippi Railway Company, under the law of this state, (Illinois), to acquire the right of operating the Springfield Division, and whether the operation of the road was under the special act creating the Springfield & Illinois Southern Railroad Company, or under that which authorized the original and consolidated railway between Illinois and Vincennes, may not be very material in this case; neither can it be material whether this result was accomplished by virtue of a special contract of lease or otherwise, made with the Springfield & Illinois Southern Company, or by virtue of a contract of purchase of that railroad."

"The question of *ultra vires*," the judge continues, "has not of late years been construed with that strictness which existed in former times, and it is a fair inference that the contract by which the Springfield Division was purchased by the Ohio & Mississippi Railway Company could not be

considered *ultra vires*, but was on the contrary a valid contract, and this independent of the legislation of the state of Indiana, by which in great part the consolidated line of railway running through the three states was constructed and operated. Again, he says, one of the principles established by the adjudication of the courts is that where a corporation has acted under a contract, and received the benefits arising therefrom, it is not competent for that corporation to deny its validity as being *ultra vires*. Under the contract in question the Ohio & Mississippi Company has received benefits in which the whole consolidated company has participated. The merging of the Springfield Division in the consolidated company, Judge Drummond holds, was an act public in its character and must be presumed to have been known to all the stockholders of the Ohio & Mississippi Company. Nearly four years had passed before any objection was made by any stockholder to the acquisition or operation of that division. During this period the mortgage on the road had been executed, and bonds had been issued and had passed into the hands of genuine purchasers, on the faith of the contracts made. It would seem that if there was any serious question as to the power of the company to make the contract, it ought to have been made at an earlier day." He decides that: "In the first place, the railway company had the right to acquire the Springfield Division and execute the mortgage and issue the bonds referred to, by virtue of the legislation of the state of Illinois, and

"In the second place—that if the right did not clearly exist by virtue of the laws of Illinois, after the lapse of so long a time, and after so many rights and equities have been acquired by different parties under the action of the railway company, it is not competent for the plaintiff, or the other stockholders of the Ohio & Mississippi Railway Company, any more than for the company itself, to question the authority under which the contract and mortgage were executed. The only power that could do that would be the state itself."

Painesville & Youngstown.—The purchasers of this road at the recent foreclosure sale met in Painesville, O., Sept. 3, and organized the Painesville and Youngstown Railway Company, which will hereafter operate the line. The road is of 3-ft. gauge and extends from Fairport, O., to Youngstown, 63 miles.

Pennsylvania.—For the purposes of its new line into the city this company has asked the Philadelphia City Council to pass an ordinance allowing it to occupy the end of Filbert street at the River Schuylkill for an abutment for a bridge, and to use the line eastwardly to Shock street, 220 feet eastward of Twenty-first street, and to bridge each and every street running north and south, lying between Merriest street on the east and the River Schuylkill on the west, provided the structure for crossing said streets shall not interfere with the use of the streets as public thoroughfares, and that there shall be a clear headway at middle of carriage way of at least thirteen feet.

Argument on the injunction asked for by Receiver Lathrop, of the New Jersey Central, to prevent the building of a branch from this road in Jersey City to the National Storage Company's docks at Communipaw, was completed Sept. 5. The Chancellor took the papers and reserved his decision.

Pittsburgh, New Castle & Lake Erie.—An application to set aside the sheriff's sale of this road noted last week, was rejected by the Court and the sale confirmed. Arrangements are being made for the reorganization of the company.

Pittsburgh Southern.—Contracts have been concluded for the extension of this road from Finley, Pa., southward to the National Road, about 15 miles. The grading will be chiefly done by the people along the line, and is in charge of a local committee.

Port Huron & Northwestern.—This company has been asked to build a branch from Davisville, Mich., to Marlette in Sanilac County, a distance of 23 miles. The people on the line offer to grade the road and furnish ties, if the company will lay the track.

Portsmouth & Dover.—An adjourned meeting of the stockholders was held in Portsmouth, N. H., Sept. 4. After discussing at some length the refusal of the Eastern Railroad Company to pay rental unless a modification of the lease is agreed to, and also a proposition of the Eastern Company to leave all matters under controversy out of the question and submit the matter to three judges, by whose decision the Eastern agreed to abide, the following was unanimously passed: "Voted, That the proposition of the Eastern Railroad to refer the matter in controversy be respectfully declined, and that our attorneys be instructed to proceed with the suit at law to recover the rent now due us."

Potomac, Fredericksburg & Piedmont.—Madison County, Va., has voted to subscribe \$50,000 in aid of the extension of this road from Orange Court House northwest to Madison Court House, about 18 miles.

Railroad Telegraph Lines.—In Washington, Sept. 9, the Baltimore & Ohio, the Wabash, the American Union Telegraph and the American Rapid Telegraph companies, filed formal acceptances of the act of Congress authorizing companies to do a general telegraph business.

St. Louis, Kansas City & Northern.—On the new Omaha Extension the iron is now laid from Pattonsburg, Mo., northwest to Marysville, 52 miles. Tracklaying is in progress from Marysville northwest and also from the Council Bluffs end, and most of the 92 miles between the two places is graded, with 27 miles of track laid from Council Bluffs. Regular trains will not be put on until the whole line is finished, which, the company expects, will be in October.

St. Louis & Southeastern.—A suit for the foreclosure of the first mortgage on the St. Louis Division has been begun in the United States Circuit Court for the Southern District of Indiana. It is similar to the one already begun in the Circuit Court for Southern Illinois.

St. Paul & Duluth.—This company offers to build a branch from its road at Wyoming, Minn., west to Taylor's Falls on the St. Croix, a distance of about 15 miles, provided the towns on the line will vote a reasonable amount of aid.

St. Paul Eastern Trunk.—This company has been organized in Wisconsin to build a railroad across the state from a point on the Mississippi or Lake St. Croix, near Hudson, to Green Bay or near Menominee, with a branch through the town of Green Bay to Lake Michigan at or near Manitowoc. The capital stock is to be \$3,500,000. The design is to give St. Paul an independent outlet to Lake Michigan, making connection by boat across the lake to Ludington or Grand Haven, and also with lake navigation generally. The western end of the proposed line is parallel and near to the western end of the Chicago, St. Paul & Minneapolis, and the eastern end is parallel and some miles north of the Green Bay & Minnesota.

Shenandoah Valley.—Track was last week laid to Berryville, in Clark County, Va., 4.3 miles beyond the late ter-

minus at the West Virginia line, and 23.6 miles from the Potomac River, at present the northern end of the track.

Southern Minnesota.—The grading of the extension of this road is now completed to Flandreau, Dak., 93 miles westward from the late terminus at Jackson, Minn. Track is laid for 38 miles west of Jackson, and the work is being pushed in the hope of running trains through to Flandreau before the end of the year.

Taylor's Falls & Lake Superior.—The town of Taylor's Falls, Minn., has voted \$18,700 bonds in aid of the building of a section of this road from that town southwest to connect with the Minneapolis & St. Louis at White Bear. The distance is about 30 miles.

Tehuantepec.—The New York Tribune of Sep. 10 says: "Recent advices from Mexico announce that work has been begun on a new railway across the Isthmus of Tehuantepec, starting from the mouth of the Coatzacoalcas River, 110 miles southeast from Vera Cruz, and extending to the inland lake on the Pacific Coast called the Upper Lagoon. The length of the main line will be nearly 150 miles. The grant for the road was made by the government of Mexico in June last to Edward Learned, of Pittsfield, Mass. It required that the company undertaking the work should deposit with the government, within six months of the date of the law, \$100,000 as a forfeit, and that it shall have imported upon the Isthmus, prior to the expiration of that period, railroad material of the value of \$200,000, or have made harbor improvements of the same value, in which case the deposit may be substituted by mortgage bonds of the company. The road is to have a single or double track four and a half feet in width, and is required to be completed within three years from the date of the approval of the contract, the company being required to construct yearly, to the satisfaction of the government, a section 39 miles in length. The right of way is 820.64 feet along the entire route, and the government gives the company such a strip of unoccupied public lands as may be required for the line of the road, and in addition one-half of the unoccupied public lands that may be found within one league from each side of the railroad. Lands are also granted for the sites of wharves, docks and other improvements required in the harbor of Coatzacoalcas and the Upper Lagoon, at which point the company is bound to construct and maintain two light-houses of the first-class which shall, however, be the exclusive property of the government. The privilege of erecting a line of telegraph is also accorded by the grant. To aid in the construction of these improvements, the government, in addition to other stipulations, binds itself to give to the company a subsidy of \$12,070.50 for each mile of railroad built, and agrees not to grant a subsidy to any other enterprise of a similar character on the same line for a period of twenty years, although the right is reserved to authorize the construction of a canal. The subsidy is to be paid on each section of five kilometers upon its completion and its approval by the Bureau of Public Works, 10 per cent. interest to be allowed in cases of any delay in such payments. The grant is limited to 99 years, and at the expiration of that time the railroad and telegraph, with stations, depots and other works, and the proper complement of rolling-stock, are to be turned over to the government in good order, upon the basis of a careful appraisal and inventory of the property. The enterprise under the terms of the grant is to remain exclusively Mexican, and the company, though formed abroad, is to be regarded as if created in the Mexican Republic and organized in accordance with Mexican laws; and those engaged in the enterprise in no case will be entitled to plead the rights accorded to aliens, and will have no power to enforce their rights otherwise than before Mexican tribunals."

Waxahachie Tap.—This road is now completed from the junction with the Houston & Texas Central, near Ennis, Tex., westward to Waxahachie, the county seat of Ellis County. It is 12 miles long and runs through a good country. It is intended to build out from Waxahachie westward hereafter.

Waynesburg & Washington.—At a meeting held in Waynesburg, Pa., Sept. 2, the stockholders voted to lease their road for 17 years to Jacob Swart and Levi Pettit, who agree to operate it, maintain it in good condition, and to pay the interest on the outstanding bonds, including a sufficient amount to fund the present floating debt. The road is of 3-ft. gauge, and runs from Washington, Pa., southward to Waynesburg, 28 miles. The bonded debt, after settling the floating debt, will be about \$120,000, or only \$4,285 per mile.

Western Union Telegraph.—At a meeting of the directors in New York, Sept. 10, the following statement was made for the quarter ending Sept. 30, September earnings estimated:

Surplus, July 1.....	\$772,469.91
Net earnings for the quarter.....	1,259,223.01
Total.....	\$2,031,692.92
Interest and sinking funds.....	\$127,000
Construction, leased lines purchase, etc.....	150,000
	277,000.00

Balance.....\$1,754,692.92
It was resolved to pay a dividend of 1½ per cent. for the quarter, which will require \$717,500, leaving a balance of \$1,037,192.92.

ANNUAL REPORTS.

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Cleveland, Mt. Vernon & Delaware.

This company owns a line from Hudson, O., to Columbus, 144.04 miles, and leases the Massillon & Cleveland road, from Clinton to Massillon, 12.60 miles, making 156.64 miles worked. There are 15.42 miles sidings on the line owned and 2.36 on that leased. The company also owns a line graded but not ironed from Killbuck to Dresden, 34 miles.

Equipment consists of 22 engines; 13 passenger and 13 baggage and express cars; 70 box, 5 stock, 10 flat, 515 coal and 10 caboose cars; 1 wrecking and 1 tool car. Six of the engines are hired from the Pennsylvania Company.

The general account is as follows:

Stock (\$12.283 per mile).....	\$1,768,798.41
Bonds (\$23.693 per mile).....	3,411,750.00
Coupons and interest matured, to be paid in cash.....	177,829.63
Bills and accounts payable.....	48,605.30
Total.....	\$5,407,073.34
Road, etc. (\$32.145 per mile).....	\$4,628,870.61
Dresden Branch, incomplete.....	208,148.22
Cash, materials, miscellaneous assets.....	37,078.01
Income account, debit balance.....	532,376.50
Total.....	\$5,407,073.34

The bonded debt consists of \$1,350,000 first-mortgage bonds; \$950,000 Columbus Extension bonds; \$660,000 income bonds, and \$442,750 funded coupons. Of the stock \$451,450 is preferred.

The traffic for the year was as follows:

Train mileage:	1878.	1877.	Inc. or Dec.	P. c.
Passenger.....	179,796	187,369	D.	7.570 4.0
Freight.....	214,520	219,134	D.	4.614 2.1
Total.....	394,316	406,503	D.	12,184 3.0
Passengers carried.....	228,693	231,980	D.	3,287 1.4
Passenger mileage.....	4,881,725	4,301,158	I.	580,567 13.5
Tons freight carried.....	259,823	240,507	I.	19,316 8.0
Tonnage mileage.....	13,068,604	12,303,647	I.	764,957 6.5
Average train load:				
Passengers, number.....	27.15	22.95	I.	4.20 18.3
Freight, tons.....	61.07	56.16	I.	4.91 8.7

Coal was 38 per cent. of the whole tonnage and furnished most of the increase in freight. Lumber, usually a considerable item, showed a great decrease. The average receipt per train mile and per unit of traffic were, in cents:

	1878.	1877.	Inc. or Dec.	P. c.
Per train mile.....	93.17	77.37	I.	15.80 20.11
Per passenger per mile.....	2.58	2.26	I.	0.32 14.16
Per ton per mile.....	1.76	1.23	I.	0.53 42.28

The average rate per ton per mile on local freight was 2.40 cents; on through, 1.22 cents, against 1.30 cents in 1877.

The earnings for the year were as follows:

	1878.	1877.	Inc. or Dec.	P. c.
Passengers.....	\$125,992.00	\$122,728.63	I.	\$3,263.37 2.7
Freight.....	230,612.94	240,359.34	D.	9,746.40 4.1
Express, mail, etc.....	20,093.18	25,808.19	I.	284.99 1.1
Total.....	\$382,698.12	\$388,896.16	D.	6,198.04 1.6
Expenses.....	317,727.01	307,171.16	I.	10,555.85 3.4
Net earnings.....	\$64,971.11	\$81,725.00	D.	\$16,753.89 20.5
Gross earn. per mile.....	2,444.73	2,484.32	D.	39.59 1.6
Net.....	415.04	522.07	D.	107.03 25.5
Per cent. of exps.....	83.02	78.98	I.	4.04 5.1

There was an increase in through passenger business, although the local business fell off slightly. This was caused by running local trains so as to make better connections than formerly. Freight earnings decreased chiefly on account of lower rates which prevailed, due to increased competition and low rates on grain from the West. Expenses were increased by the larger amount required last year for the maintenance of the property.

The income account was as follows:

Earnings main line.....	\$366,564.33
Massillon Branch.....	16,133.79
Total.....	\$382,698.12
Expenses main line.....	\$301,290.97
Massillon Branch.....	16,466.04
Rent of Massillon Branch.....	20,000.00
Interest on coupon certificates.....	20,495.70
One-half interest on bonds, payable under agreement.....	80,500.00
Total.....	\$444,752.71

Deficit for the year.....\$62,024.50
Add remaining half interest on bonds.....80,500.00
Debit balance, Dec. 31, 1877.....389,851.91

Debit balance, Dec. 31, 1878.....\$532,376.50

The loss on the Massillon Branch was: Deficit in working, \$332.25; rental, \$20,000; total loss, \$20,332.25, against \$19,044.56 in 1877.

During the year 157 tons of new rails and 55,123 new ties were laid. More iron will be needed yearly hereafter, as that in the track is beginning to deteriorate. The work of ballasting has been continued. The equipment has been fairly maintained, but has reached the point where more renewals will be required.

The subscription to equip the Mt. Vernon shops has been tied up by legal proceedings, and the question of its legality is now before the Ohio Supreme Court.

Nothing has been done as to the completion of the Dresden Branch, though there have been some negotiations to that end.

The gauge of the road was changed from 4 ft. 10 in. to

4 ft. 9 in. during the year, causing some increase in expenses.

The report says: "The relations of your company with its bondholders also continue unchanged from what they were reported at the close of last year; the net earnings of the road having been paid monthly, one-half to them, and one-half to the Pittsburgh, Cincinnati & St. Louis Railway Company, in liquidation of the account for terminal facilities furnished your company from Sept. 1, 1873, to Dec. 31, 1877. This account will in all probability be entirely paid during the current year, when your company will be entirely free of floating debt. Active steps should then, and doubtless will be taken by all the parties in interest for a complete and final reorganization of the company's financial affairs on such a basis that the net earnings will, beyond a reasonable contingency, suffice to pay currently the fixed charges for interest on the new bonds that it may be considered proper to issue in payment of the existing funded debt."

Nashville, Chattanooga & St. Louis.

This company owns a line from Chattanooga, Tenn., through Nashville to Hickman, Ky., 321 miles; a branch from Wartrace, Tenn., to Shelbyville, 8 miles; a branch from Bridgeport, Ala., to Victoria, Tenn., 19.5 miles; the Tennessee & Pacific road, from Nashville, Tenn., to Lebanon, 30 miles; the McMinnville & Manchester, from Tullahoma, Tenn., to McMinnville, 35 miles, and the Winchester & Alabama, from Decherd, Tenn., to Fayetteville, 40 miles, making 453.5 miles owned and worked. The three last-named lines were bought a little over two years ago. The report is for the year ending June 30, 1879.

Since the close of the year the company has bought a controlling interest in the Owensboro & Nashville road, more fully referred to below.

The earnings for the whole system, 453.5 miles, for the year were as follows:

	1878-79.	1877-78.	Inc. or Dec.	P. c.
Freight.....	\$1,231,171	\$1,287,323	D.	\$56,152 4.4
Passage.....	441,545	516,383	D.	74,838 14.5
Mails.....	41,260	42,844	D.	1,584 3.7
Rents and privileges.....	22,747	25,250	D.	2,512 6.0
Total.....	\$1,736,723	\$1,871,809	D.	\$135,086 7.2
Expenses.....	1,021,588	1,070,270	D.	48,682 4.5
Net earnings.....	\$715,135	\$801,539	D.	\$86,404 10.8
Gross earn. per mile.....	3,830	4,127	D.	297 7.2
Net.....	1,577	1,767	D.	190 10.8
Per cent. of expenses.....	58.82	57.18	I.	1.64 2.9

The loss in freight was proportionately much less than in passenger business. The whole loss was largely from through business.

The income account was as follows:

Net earnings as above.....	\$715,135
Interest on bonded debt.....	\$404,630
Interest on floating debt.....	13,364
Interest on cost of Tenn. & Pacific.....	10,806
Difference of cost, steel over iron rails.....	23,828
Extra ties for steel rails.....	6,037
Taxes in Tennessee charged up, but not paid.....	22,080
Two dividends paid.....	164,161
Total.....	\$708,016

Surplus for the year.....\$7,119

The deficit, after paying all charges on the Nashville, Chattanooga & St. Louis proper, was \$1,880; on the McMinnville & Manchester, \$3,890; on the Winchester & Alabama, \$11; total, \$5,781; surplus on Tennessee & Pacific, \$12,900, leaving a surplus balance of \$7,119 for the year as above.

During the year 40 1/4 miles of steel rails were laid to replace iron. Under these rails 600 ties more to the mile were laid than with iron.

The earnings of the Main Line, Shelbyville and Jasper branches, the original road, for the year were as follows:

	1878-79.	1877-78.	Decrease.	P. c.
Gross earnings.....	\$1,647,596	\$1,760,160	\$112,564	6.4
Expenses.....	973,867	1,013,020	39,753	3.9
Net earnings.....	\$673,729	\$746,570	72,841	9.8
Payments made.....	675,609	705,929	30,320	4.3
Surplus.....		\$40,641		
Deficit.....	\$1,880			

The earnings were at the rate of \$4,728 per mile, gross, and \$1,933, net for the year, against \$5,051 and \$2,142 the previous year. The earnings, etc., of the lately acquired lines were as follows:

	Tenn. & Pacific.	McMinn. & Man.	Win. & Ala.
Gross earnings.....	\$43,835	\$18,972	\$26,319
Expenses.....	17,728	13,262	10,730
Net earnings.....	\$26,107	\$5,710	\$15,589
Interest paid.....	13,367	9,600	9,600
Surplus.....	\$12,900	\$3,890	\$11
Deficit.....			

The Tennessee & Pacific earned \$1,461 gross and \$870 net per mile; the McMinnville & Manchester, \$542 gross and \$103 net; and the Winchester & Alabama, \$658 gross and \$240 net.

The President's report says: "In addition to the foregoing, \$34,478 was paid during the year for iron bridges on the Chattanooga Division to take the place of wooden ones. The past year was the most trying one upon your road in its history, first, on account of the almost entire failure of the wheat crop in Tennessee last season, and the very short corn crop, greatly reducing local freights, upon which better rates are received, and forcing us to compete to replace it from distant points. To secure these and other through freights, they had to be carried at very low rates, in some instances at only a fraction above cost of transportation, in competition with lines, the managers of which seemed to work for tonnage without much regard to revenue. Next, the prevalence of yellow fever in epidemic form at Memphis, and on your line at Chattanooga, Martin and Hickman, seriously affected the income of your road, and the loss of net earnings from these causes could not have been less than eighty to one hundred thousand dollars. When these unavoidable misfortunes are considered, the results of the year's operations must be highly satisfactory to the stockholders." **

The expenses were one cent per train mile, or \$13,612 less than for the preceding year, while the revenue received was six cents per train mile, or \$81,677 less than for the preceding year. About \$40,000 of this sum was lost from passage growing out of the prevalence of yellow fever, and was a loss of net revenue.

"In the last six months considerable advance has been made in the price of your securities, and yet they have not reached their real value, but will do so, no doubt, as soon as the cloud, which some of the holders of Tennessee state bonds have attempted to throw over them by suit, is dissipated. The legal talent of this state is agreed that they have no cause of action against the railroads. This company is interested in the question of bonds loaned by the state to railroads to the amount of only 120 \$1,000 bonds lent to Jasper Branch, and even that number has been paid to the state in bonds of other series. No one believes that the sold roads can be interfered with.

"It is hoped that with good business, which now looks promising, the small floating debt remaining may be paid off during the year just entered upon, by the sale of assets and

use of surplus profits remaining after paying dividends to stockholders, and still continue the improvement of property in laying steel rails, etc.

"By action of the board of directors, and written consent of a majority in amount of the stockholders, this company agreed to furnish the iron, lay the track and equip certain sections of the Nashville & Tusculocosa (narrow-gauge) Railroad, not to exceed in liability \$5,000 per mile, whenever the stockholders of that road would prepare it ready for the iron by doing the grading, bridging, and furnishing the cross ties, in sections of 20 miles, commencing at Dickson Station on your Northwestern road. The first section of 20 miles has been made ready for the iron, most of the track is already laid, trains are running to Bon Aqua Springs, a popular watering-place upon its line, and the whole of this section will soon be finished. It is believed the responsibility of your company for this enterprise will not reach the limit fixed. The President of the Nashville & Tusculocosa Railroad will soon make a determined effort to reach Centreville, and push out at an early day seven miles beyond that point to penetrate the almost inexhaustible deposits of brown hematite iron ore of that section, the accounts of which, as to quality and quantity, given to us by geologists and experts, are almost fabulous. * * *

"Your directors have bought a large controlling interest (two-thirds) in the stock of the Owensboro & Nashville Railroad for your company at the very small cost of about \$175,000. In the construction of this road about \$2,500,000 have been spent, according to *Poor's Manual*. It is completed and running 37 miles from Owensboro to the crossing of the Elizabethtown Paducah Railroad. From that point to the Tennessee state line near Adairsville, the grading and bridging lacks but a fraction of being finished, leaving but 36 miles to grade between Adairsville and Nashville. It is estimated by competent engineers that to finish this road in first-class order with steel-rail track and with an independent bridge over the Cumberland River, near Hyde's Ferry, near Nashville, will not cost, in money, exceeding \$10,000 per mile, or \$1,200,000 for the whole, the distance from Owensboro to Nashville being about 121 miles. The company has no bonded debt out. Preparations are being made for an early completion of this road, which will, with the proposed roads from Owensboro to Evansville and from Owensboro to Terre Haute, give the nearest route between Atlanta, Ga., the great distributing point for the South, and the grain producing sections of the West, and must, when completed, add greatly to the business of the Chattanooga Division of your line. This road runs through one of the best sections of Kentucky, and through fields of bituminous coal, veins of which are very thick and of superior quality, and it will be a paying road."

Texas & Pacific.

During the fiscal year ending May 31, 1879, no additions were made to this company's road. It consists of the lines from Shreveport, La., to Fort Worth, Tex., 219.69 miles; from Marshall to Texarkana Junction, 69.05 miles, and the Transcontinental Division, from Texarkana to Sherman, 155.12 miles. There are 40.71 miles of sidings, 1.27 miles having been added during the year.

The equipment consists of 49 engines; 26 passenger, 2 combination and 13 baggage, mail and express cars; 483 box, 160 stock, 288 flat and 31 caboose cars; 1 directors'; 6 boarding, 2 wrecking and 2 pile-driver cars.

The total land grant of the company amounts, so far, to 5,491,702 acres; of this 640,000 acres were transferred in trust, but of this probably 80,000 acres will be returned. Sales for the year amounted to \$31,222.30; cash receipts on land account were \$28,685.85, besides \$5,249.57 in bills payable. Expenses of Land Department were \$28,005.77 for the year.

The general account (condensed) is as follows:

Stock.....	\$6,000,000.00
Bonded debt.....	19,286,264.30
Sinking fund, first-mortgage bonds.....	71,040.00
June coupons.....	96,400.00
Special loans running one to five years.....	587,097.11
Replacement of equipment.....	29,320.00
Land accounts.....	60,840.42
Bills and accounts payable.....	547,905.82
Balance of income account.....	105,380.71
Total.....	\$27,770,228.36

Construction (including cost of survey and location of entire line to San Diego).....	\$26,638,713.29
Stocks, bonds, etc.....	431,737.30
Suspense account.....	120,100.99
Land accounts.....	302,246.94
Cash, materials and receivables.....	271,390.84
Total.....	\$27,770,228.36

The bonded debt consists of \$3,552,000 first-mortgage, \$7,548,000 consolidated, \$6,994,000 income and land-grant, and \$773,000 old land-grant bonds, with \$131,015 funded coupons of the last named issue; \$185,366.42 Texas school fund loan; \$95,997.88 bond scrip and \$5,985 interest scrip.

The traffic for the year was as follows:

Train mileage:	1878-79.	1877-78.	Inc. or Dec.	P. c.
Passenger.....	413,938	412,839	I.	1,099 0.3
Freight.....	712,460	784,900	D.	72,440 9.3
Service and switching.....	355,988	349,600	I.	6,388 1.8
Total.....	1,482,386	1,547,339	D.	65,049 4.2
Passengers carried.....	191,958	245,112	D.	53,154 27.7
Passenger mileage.....	11,651,044	15,004,800	D.	3,353,756 22.4
Tons freight carried.....	379,125	388,967	D.	9,842 2.5
Tonnage mileage.....	50,723,818	51,022,434	D.	298,616 0.6

Av. train load:
Passengers, number..... 28.15 26.35 D. 8.20 22.7
Freight, tons..... 71.19 65.01 I. 6.18 9.5

Of the tonnage moved 26.29 per cent. was lumber, 16.17 per cent. cotton and 10.60 per cent. live stock; cotton carried was 247,972 bales, an increase of 15.63 per cent. The loss of traffic was chiefly in lumber and stock.

The earnings for the year were as follows:

	1878-79.	1877-78.	Inc. or Dec.	P. c.
Passengers.....	\$456,576.31	\$59,694.12	D. \$136,117.81	23.
Freight.....	1,582,925.90	1,660,645.14	D. 77,719.24	4.
Express, mail, etc.....	90,641.44	77,971.09	I. 18,670.35	23.
Total.....	\$2,136,143.65	\$2,331,310.35	D. \$195,166.70	8.
Expenses.....	1,307,513.87	1,448,439.38	D. 50,925.51	3.
Net earnings.....	\$738,629.78	\$882,870.97	D. \$144,241.19	16.
Gross earn. per mile.....	4,811.13	5,250.70	D. 439.57	8.
Net earn. per mile.....	1,663.58	1,988.45	D. 324.87	16.
Per cent. of ex- penses.....	65.42	62.13	I. 3.29	5.

CONNECTICUT MINOR RAILROADS IN 1878.

NAME OF ROAD.	PROPERTY.					LIABILITIES.				TRAFFIC.				EARNINGS.					Interest and rentals.	Dividends.
	Miles owned.	Miles leased.....	Locomotives.....	Passenger train cars.	Freight and other cars.....	Stock.....	Bonds	Other debt.....	Train mileage.	Passenger mileage..	Tonnage mileage....	Rate per passenger per mile.....	Rate per ton per mile	Gross earnings.....	Expenses.....	Net earnings.	Gross earnings per mile.....	Net earnings per mile.....		
Connecticut Central.....	27	7	3	5	22	\$437,000	\$312,500	\$13,344	107,480	935,584	1,178,531	Cts. 2.71	Cts. 4.30	\$84,031	\$69,841	\$14,190	\$2,471	\$417	83	\$30,460
Connecticut Valley*	46	7	21	159	1,069,000	2,250,000	281,578	184,745	3,367,259	1,987,730	3,233	4.00	167,846	145,248	22,598	3,633	489	86	1,837	
Connecticut Western.....	07	10	13	219	1,890,100	2,945,500	37,839	216,527	2,791,790	3,611,314	3,07	3.60	227,705	175,020	52,685	3,414	851	77	10,427	
Danbury & Norwalk.....	34	6	11	83	600,000	500,000	105,430	2,557,337	932,634	2,72	8.70	159,565	111,444	48,121	4,721	1,424	70	34,771		
New Canaan.....	8	2	1	1	104,050	99,878	18,672	242,998	29,151	3.12	14.70	13,004	11,868	1,136	1,567	147	91	175		
New Haven & Derby.....	13	3	6	28	445,000	525,000	87,579	43,546	1,039,209	586,306	2.88	8.60	102,113	60,473	41,640	7,855	3,203	59	27,465	
Shepaug.....	32	3	4	23	297,000	400,000	33,950	42,619	275,734	351,347	3.60	7.60	47,646	37,609	10,037	1,476	311	79	2,719	

* Operated by State Treasurer as Trustee for the first-mortgage bondholders.

The above figures are from the reports made to the Connecticut Railroad Commission for the year ending Sept. 30, 1878, and include all roads whose reports have not been otherwise presented or included in lessees' reports.

renewals. There were 1,760 tons of steel rails, 141,700 new ties and a large amount of other material put in the track; the work of ballasting was continued. Much was done in renewing and improving bridges, filling in trestles and similar work. The buildings of the road were fully maintained and many improvements made.

The income account (condensed) was as follows:

Balance, May 31, 1878.....	\$376,218.48
Less sinking fund, old interest, etc.....	159,384.00
Net balance.....	\$216,834.48
Gross earnings.....	2,136,143.65
Total.....	\$2,352,978.13
Expenses of road.....	\$1,397,513.87
Legal expenses, premium, taxes, etc.....	137,065.81
Interest.....	712,417.74
	2,247,507.42
Balance, May 31, 1879.....	\$105,380.71

Concerning further Congressional aid to the road the report says:

"The application heretofore made to Congress, for the government to guarantee the payment of interest on a limited number of your company's bonds, in order to secure the speedy completion of its line connecting the waters of the Mississippi River with the Pacific Ocean, was renewed at the last session of the Forty-Fifth Congress, with a determination to bring the measure to a final vote. A united effort was made by the friends of the measure to pass the bill reported at the previous session. The combined influences unfriendly to the bill, together with a want of harmony and cooperation among many prominent Southern gentlemen, whose constituencies were supposed to be more immediately interested in the success of the enterprise, prevented either House of Congress from waiving, in its favor, the consideration of public and political measures that had precedence of this bill in the regular order of business on the calendars.

"After several ineffectual efforts to secure a consideration of the measure, it became apparent that the bill could not be passed, and its further prosecution was abandoned.

"But this does not, and should not, by any means, involve an abandonment of the enterprise. The large amount of capital, both in this country and in Europe, that is seeking investment in good securities, encourages the hope that, under the very liberal provisions of our charter, we may speedily extend our line to the Pacific coast with private capital. The discussion in Congress, and through the public press of the country, during the pendency of our application to Congress for aid, showed clearly the necessity for such a line of railway, and created a wide-spread public sentiment in favor of the commercial value and importance of a transcontinental line of railway, on or near the thirty-second parallel of north latitude, which must attract private capital to its early construction.

"While the construction of this line is so greatly needed in the interests of the transcontinental commerce, its value in opening up to this country the trade and commerce of old Mexico, via El Paso, can hardly be overestimated. The completion of the Texas & Pacific road to El Paso will make tributary to the merchants of the United States the rich provinces of Chihuahua, Sonora, Coahuila, Sinaloa and Durango, and will insure the construction of a railway along the high table-lands, extending southwardly from El Paso toward the coast, to the city of Mexico. Such a line of railway will enable the merchants of the United States to compete successfully for the trade and commerce of a population of upward of nine and one-half millions of people that are now supplied almost entirely from England, Germany and France, via the Gulf and Pacific ports.

"It is estimated that within five years of the completion of this line of railway to El Paso, the trade and commerce that will be exchanged between this country and Mexico will more than equal, both in volume and importance, the present through traffic from the Pacific coast."

Connecticut & Passumpsic Rivers.

This company owns a line from White River Junction, Vt., northward to Derby Line on the Canada boundary, 110.8 miles; it leases (and practically owns) the Massawippi road, from Derby Line to the Grand Trunk at Sherbrooke, P. Q., 34.7 miles, with a branch to Stanstead, 2 miles, making 147 miles worked. It formerly leased the Southeastern and now controls the Montreal, Portland & Boston road in Canada, but their accounts are kept separately. The report is for the year ending June 30, 1879.

The equipment consists of 28 engines; 26 passenger-train cars; 660 freight cars; 127 road and service cars and 7 snow-plows.

The general account (condensed) is as follows:

Stock (\$19,725 per mile).....	\$2,175,700.00
Bonds (\$12,823 per mile).....	1,388,500.00
Notes payable.....	233,000.00
Sundry accounts and balances.....	30,883.27
Earnings.....	105,398.34
Reserve.....	330,375.52
Total.....	\$4,263,857.13
Construction (\$31,250 per mile).....	\$3,447,825.29
Missisquoi & Clyde Rivers bonds.....	350,000.00
Mt. Washington stock.....	13,600.00
Montreal, Portland & Boston R. R.....	57,023.73
Memphremagog House.....	25,242.39
E. Raymond, in trust.....	159,893.44
Cash, materials and receivables.....	210,272.38
	4,263,857.13

The bonds outstanding increased \$115,500, and notes

\$60,000 during the year. No additions were made to construction account. The company owns about 2,200 acres wood land and a number of dwellings and other buildings not used for the road.

The traffic for the year was as follows:

Train mileage.....	1878-79.	1877-78.	Inc. or Dec.	P. c.
Passenger.....	253,605	256,825	D.	3.250
Freight.....	180,498	140,610	I.	18.888
Service.....	7,973	7,901	I.	372
Total.....	422,076	405,036	I.	17.040
Passengers carried.....	135,494	133,303	I.	2.191
Passenger mileage.....	4,400,575	4,464,983	D.	64.408
Tons freight carried.....	136,115	131,923	I.	4.162
Tonnage mileage.....	8,574,448	8,179,341	I.	395.107
Av. rate per ton per mile.....	17.35	17.99	D.	0.05
Freight, tons.....	53.42	58.17	D.	4.75

Passenger business showed a considerable decrease. Freight business increased, but was carried at lower rates, owing chiefly to a bad lumber market and to competing lines.

The earnings for the year were as follows:

Passengers.....	1878-79.	1877-78.	Inc. or Dec.	P. c.
Passengers.....	\$194,276.34	\$201,030.61	D.	\$6,754.27
Freight.....	294,477.18	311,023.54	D.	16,546.36
Mails and express.....	26,168.96	28,825.17	D.	2,656.21
Rents.....	10,022.93	17,732.96	D.	7,710.03
Total.....	\$324,945.41	\$558,612.28	D.	\$233,666.87
Expenses.....	324,447.51	336,021.64	D.	11,574.13
Net earnings.....	\$200,497.90	\$222,590.64	D.	\$22,092.74
Gross earn. per mile.....	3,571.06	3,860.08	D.	229.02
Net earn. per mile.....	1,363.93	1,514.22	D.	150.29
Per cent. of exps.....	61.80	60.15	I.	1.65

Earnings have been diminished by loss of passenger business and low rates. A large bark and hay traffic has lately been opened up by the extension of the Southeastern road, from which an increase is looked for.

The income account was as follows:

Net earnings, as above.....	\$200,497.90
Interest received.....	19,196.62
Total.....	\$219,694.52
Interest on bonds and notes.....	\$100,782.50
Interest on Massawippi bonds.....	24,000.00
Dividends on stock.....	85,184.00
Dividends on Massawippi stock.....	12,000.00
	201,966.50
Surplus for the year.....	17,728.02
Surplus as per last report.....	87,670.32
Total surplus, July 1, 1879.....	\$105,398.34

The result of the year was on the whole favorable, all charges having been met and dividends paid. There were used in renewals 404 tons iron rails, 201 tons steel rails and 57,889 new ties; 6,166 rails were repaired and relaid. One engine and two passenger cars were added, and the equipment generally improved in condition. The road and bridges were kept in thorough repair. It is recommended that \$100,000 be borrowed for the purpose of buying steel rails.

The report says: "The Southeastern Railway, from which we expected so much years ago, and which has caused us so much loss and unpleasant controversy, has lately passed into other hands and is now being put into first-rate condition, and 1,200 tons of steel rails will be laid in the track this season. Our relations with that road at the present time are of the most friendly nature, and we feel confident will continue both pleasant and advantageous.

"In order to effect the extension of our line into Montreal, independent of the Central Vermont and Grand Trunk railways, whose charges to us were such as to virtually preclude our doing any freight business, it was necessary that the Montreal, Portland & Boston Railway should be completed between West Farnham and Longueuil; and in view of the importance of securing this independent line the directors did not hesitate to authorize the obtaining control of the Montreal, Portland & Boston road, and the expenditure necessary to complete it. That road has been finished to Longueuil, opposite the city of Montreal, and our cars are now running from Boston to Longueuil, and by ferry across the St. Lawrence River to Montreal; thus avoiding the unwarrantable charges and delays which we have been subject to heretofore, and will enable us to make a popular line between Boston and Montreal.

"Arrangements are agreed upon whereby the Southeastern road will operate the whole line between Newport and Montreal. By this arrangement we shall receive interest on the money invested, and at the same time secure to our road the benefit of the additional business developed.

"Our relations with all connecting roads are friendly, and with these extensions of the line accomplished we confidently look for some improvement in the business of the road the coming year."

Terre Haute & Indianapolis.

This company owns a line from Indianapolis, Ind., westward to the Illinois line near Terre Haute, 80 miles, with 34 miles of coal branches. It leases the St. Louis, Vandalia & Terre Haute road from the Illinois line to East St. Louis, 158 miles, but the operations of the leased line are reported separately, and we have already published a summary thereof. The road and its leased line are commonly known and called the Vandalia Line. The last report is for 11 months ending Oct. 31 last, the fiscal year having been

changed to end at that date instead of Nov. 30, as previously.

The equipment consists of 40 engines; 22 passenger and 15 baggage, mail and express cars; 209 box, 85 stock, 68 flat, 614 coal and 16 caboose cars; 40 road and service cars.

The general balance at the close of the year was as follows:

Stock (\$17,440 per mile).....	\$1,988,150.00
Bonds (\$14,037 per mile).....	1,600,000.00
Bills and accounts payable, February dividend.....	291,968.05
Surplus.....	1,280,363.47
Total.....	\$5,169,511.52
Construction (\$27,030 per mile).....	\$3,081,378.20
Stocks and bonds.....	1,354,525.13
Sundry accounts.....	272,518.81
Cash, materials and receivables.....	452,089.32
	5,169,511.52

The funded debt consists entirely of 7 per cent. first-mortgage bonds, of two issues. There has been no change in stock or bonds for five years past.

The traffic for the eleven months was as follows:

Train mileage.....	203,305
Passenger.....	615,386
Freight.....	25,185
Service.....	873,876
Total.....	1,504,652
Passengers carried.....	1,001,078
Tons freight carried.....	1,001,078

The road is one of the chief carriers of through freight from St. Louis eastward, and it also has a large local traffic, especially in coal, as it reaches the coal fields around Terre Haute and the block-coal mines of Western Indiana.

The earnings and income account were as follows:

Passengers.....	\$236,375.26
Freight.....	617,039.86
Express, mail, etc.....	40,377.73
Total.....	\$893,792.85
Expenses (63.45 per cent.).....	567,113.04
Net earnings (\$2,865.61 per mile).....	\$326,679.81
Add dividends on stock owned.....	39,986.25
Total.....	\$366,666.06
Interest.....	\$101,132.50
Dividends (8 per cent.).....	159,052.00
Proportion of loss on leased line.....	24,095.56
Loss on lease prior to Nov. 30, 1877.....	58,341.71
Profit and loss.....	7,265.38
	349,888.15

Balance to surplus..... \$16,777.91

Losses on the leased line are partly borne by the Pennsylvania Company and the Pittsburgh, Cincinnati & St. Louis, joint owners and guarantors, with the lessee.

For the full year 1876-77, the gross earnings were \$1,026,028.13; expenses, \$707,256.02; net earnings, \$318,772.11, so that there was last year a slight proportional decrease in gross earnings, but a considerable gain in net earnings.

South Carolina.

This company owns a line from Charleston, S. C., to Augusta, Ga., 137 miles, with branches from Branchville, S. C., to Columbia, 68 miles, and from Kingsville, S. C., to Camden, 37 miles, making 242 miles in all. Since September, 1878, the road has been in the hands of a receiver in a suit begun by the second-mortgage bondholders, and for that reason the company has made no detailed report for the last fiscal year. The following statements for the year ending Dec. 31, 1878, have, however, been published.

The equipment consists of 43 engines; 49 passenger-train cars; 357 box, 10 stock and 95 flat cars.

The traffic for the year was as follows:

Passengers.....	1878.	1877.	Inc. or Dec.	P. c.
Passengers.....	104,065	104,620	D.	555
Tons freight carried.....	252,366	244,807	I.	7,559
Tonnage mileage.....	20,993,411	20,093,411	I.	10,098.79
Av. rate per ton per mile.....	2.683	2.683	I.	0.000

The decrease in passengers was accompanied by an increase in freight carried, apparently at lower rates. The earnings for the year were as follows:

Passengers.....	1878.	1877.	Inc. or Dec.	P. c.
Passengers.....	\$183,641.19	\$186,560.22	D.	\$2,919.03
Freight.....	804,918.73	820,841.24	D.	15,922.51
Mails.....	23,301.69	13,262.00	I.	10,039.69
Total.....	\$1,011,861.61	\$1,020,663.46	D.	\$8,802.75
Expenses.....	602,555.92	593,753.47	I.	8,802.45
Net earnings.....	\$409,305.69	\$426,910.89	D.	\$17,605.20
Gross earn. per mile.....	4,181.25	4,217.62	D.	36.37
Net earn. per mile.....	1,691.35	1,704.09	D.	72.74
Per cent. of exps.....	59.55	58.17	I.	1.38

No statement of payments from net earnings is made. The Receiver has paid some coupons on the first-mortgage bonds, by order of the Court, but most of the interest on bonded debt is in arrears. The company had a large floating debt, which has been the chief cause of its embarrassments.

The earnings of the road have decreased steadily for several years, chiefly on account of the sharp competition for the business of the interior caused by the building of new lines, resulting not only in division of business, but also in reduction of rates.